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PALLAVA ARCHITECTURE,

Part II.

(*Intermediate or Māmalla Period.*)

BY

A. H. LONGHURST,

Superintendent, Archæological Survey, Southern Circle.



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PALLAVA ARCHITECTURE

PART II

CHAPTER I.

The Intermediate or Māmalla Period.

(*CIR. 640 to 674 A. D.*)

IT will be remembered, that the great Pallava king Mahēndravarman I was succeeded by his son Narasimhavarman I in the second quarter of the seventh century. Narasimha was surnamed Māmalla or Mahāmalla and he founded the sea-coast town of Mahāmallapuram, now the village of Mahābalipuram in the Chingleput district of the Madras Presidency and popularly known as the Seven Pagodas. The village lies about 40 miles south of Madras on a strip of sand, about a mile wide, between the sea and the Buckingham Canal. The latter has been made along the hollow which appears to have been formerly an extensive backwater, connected with the open sea. It can be reached from Madras by motor or by boat on the canal. The nearest railway station is Chingleput, 19 miles distant.

The correct name of the place is, of course, Māmallapuram, and it is a pity that it was changed to Mahābalipuram in later times, in order that the name of the village should coincide with the fabulous legend concerning the great Bāli, the mythical founder of this once important town, according to local tradition.

The Anglo-Indian name of "Seven Pagodas" seems to owe its origin to English mariners. Before the extensive casurina plantations were made all along this coast in recent times, the spires and towers of many of the loftier monuments would have been clearly visible to passing ships. From a mariner's point of view, the place is important as it marks a dangerous submerged reef of rocks a few miles out at sea and for this reason a Lighthouse was built in 1900. Another instance, on the same coast too, where the popular name of a place owes its origin to English sailors, is the famous Sun Temple at Konarak, near Puri, which has been dubbed the "Black Pagoda."

That the place was once a flourishing town we know from certain inscriptions. The mounds of broken pottery and debris now covered with drift sand also indicate that the site was once largely inhabited. Since the days of the Venetian traveller Manucci, who seems to have been the first European to draw attention to the wonderful sculptural figures at Māmallapuram, there must have been many a traveller whose curiosity was roused by these remarkable monuments and who speculated as to their origin. It is only recently that epigraphical research has established their true origin. Previous writers placed too great a reliance on local traditions and native interpretations. In the present instance there was exceptional cause for misconception, as the numerous representations of the different Hindu deities portrayed at Māmallapuram differ in many respects from the conventional types of later times. The popular legends concerning Bāli, and the famous Pāndava brothers and their common spouse Draupadī, have not only been the means of bestowing a false name to the place but many of the temples have been given absurd names which have nothing in common with their true origin. But as these names are widely known and appear in all previous accounts of the Seven Pagodas, it would only add to further confusion to alter them now. So they will be retained in the descriptions of the monuments given here for the sake of reference to previous works on the subject. I will merely point out in passing, where these mistakes occur.

The few Pallava inscriptions discovered at Māmallapuram and also at Sāluvankuppam, a hamlet three miles north of Māmallapuram, which seems to have once formed a suburb of the latter place, have been fully dealt with by Dr. Hultzsch (*Epigraphia Indica, Vol. X*). These records are, however, singularly uninteresting and devoid of historical facts. All that we learn from them is a string of names and surnames of three different Pallava kings and the fact that the monuments on which they are engraved were Śaiva shrines and bore each the name of its respective founder. The language of these old records is Sanskrit, and Dr. Hultzsch states that "The fact that a northern alphabet was employed along with a southern one suggests that the artisans were recruited from the north of India." Certain features of some of the sculptures also indicate the same fact and will be referred to again in detail later on.

Although most of the examples at Māmallapuram may, for the sake of convenient classification and description, be said to belong to the Māmalla style, it is obvious that they could not have all been excavated during that king's lifetime and the inscriptions record the same fact. The latter show that the earliest monuments were excavated during Māmalla's reign in the second quarter of the seventh century and that his son and successor Mahēndravarman II, and also the latter's son Paramēsvaravarman I, carried on the work begun by Māmalla. The monuments show that they kept more or less to the original style introduced during Māmalla's reign until we come to the Rājasimha period

(Cir. 674 to 800 A. D.) when the earlier rock-cut examples are replaced by structural temples, as exemplified in the famous Shore Temple at Māmallapuram. As we are now concerned only with examples in the so-called Māmalla style the later monuments belonging to the Rājasimha period will be dealt with subsequently.

Examples in the Māmalla style are of three kinds:—Cave-temples, monolithic free-standing temples commonly known as *raths* or *rathas* and rock sculptures.

Cave-temples.—These are subterranean rock-cut excavations similar in style and on plan to the earlier examples of the Mahēndra period. But as the masons became more skilled in their work they improved on the original design and we find the clumsy cubical pillars with corbel capitals of the Mahēndra period replaced by elegant pillars of good proportion and the interiors often decorated with sculptural figures in high-relief of great beauty and executed with remarkable skill.

Raths.—The so-called *raths* (literally, "cars," a misnomer applied to them by Hindus owing to their fugitive resemblance to the wooden temple cars used in processions) are rock-cut models of structural temples mainly of timber construction. They vary in style and on plan but are ornamented with sculptural figures and carving similar to that found on the cave-temples.

Rock Sculptures.—These are large bas-relief sculptural scenes carved on the natural face of a cliff or huge rock standing in the open air and are different from anything of the kind found elsewhere in India.

The most remarkable natural feature of the place is the rocky hill, about half a mile long from north to south and a quarter of a mile wide from east to west, which rises abruptly from the sandy plain in a solid mass of bare gneiss rock to a height of nearly a hundred feet. The top and sides of this hill are carved, scored or excavated in numerous places, and some of the many outlying rocks and detached boulders with which it is surrounded have been hewn into shrines and antique monuments. As the hill runs from north to south, its eastern side faces the sea and it is on this side where the more important monuments are situated so as to face the east and also enjoy the cool breezes from the sea. However, there are quite a number of cave-temples on the other side of the hill which faces the west. Being rock-cut monuments their orientation in some cases must have been rather a matter of chance than of choice perhaps, but most of them face either the east or the west, usually the latter. A few were dedicated to Vishnu but most of them were devoted to the worship of Siva and his consort Pārvati the latter sometimes in the form of Durgā. In a few cases, a combined worship of Siva and Vishnu seems to have occurred in the same temple.

Apart from the architectural value of this group of rock-cut temples as the prototypes of South Indian temple architecture, they are particularly interesting from an iconographical point of view. Just as the temples of this group

are the prototypes of the elaborate buildings of the sixteenth and seventeenth centuries, so the debased images which decorate these later edifices are derived from the natural forms of the seventh century as exemplified in the beautiful sculptural figures adorning these early Pallava temples.

A striking feature about these early sculptures is the sober and moderate style in which they are executed which contrasts strongly with the productions of later times. Here they are free from the exaggeration of form, the lack of proportion and the exuberance of ornament which usually disfigure later Indian art.

As most of the monuments at Māmallapuram are without inscriptions, we have to rely mainly on their architectural style in arriving at their approximate age. The inscriptions do, however, inform us that they were executed during three different periods and the style of the monuments themselves indicates the same fact. Since the style of one period usually merges gradually into that of the next, exact lines of demarcation between any two styles are not always apparent. But in the present case, an early, an intermediate, and a later style are clearly discernible.

The earlier monuments have such a striking resemblance to those of the Mahēndra period described in Part I, that one is inclined to think that they were executed by masons who had been formerly in the employment of Māmalla's father in other parts of the Pallava dominions and that Māmalla engaged these men to assist him in building the new sea-coast town which he named after himself.

Pallava Emigration.—The visitor to Māmallapuram will doubtless wonder why this desolate spot was selected by Māmalla for the site of his new town. It must be remembered that the Pallavas were a great maritime people from very early times and sent forth emigrants to such distant places as Java, Sumatra, and Borneo where they founded Hindu settlements and introduced their own Brahmanical religion and civilisation. Although the epigraphical records of India give no account of these mercantile and missionary relations between India and the Malay Archipelago with the exception of a few copper plate charters of the Chōla Dynasty, the style of the monuments and early Sanskrit inscriptions discovered in the Archipelago, clearly point to Southern India as the home-land of this ancient Hinduised civilisation.

In a paper entitled—'*The relation between the Art of India and Java,*' by Dr. J. Ph. Vogel, published by "The India Society" in 1925, Dr. Vogel informs us that the earliest Sanskrit inscriptions discovered in the Archipelago are composed in plain but pure Sanskrit and belong to about the fifth century A. D., and that they are records of a line of Hindu or Hinduised *rājas* who bore names ending in *varman*, such as Asvavarman, Mūlavarman and Pūrnavarman. With reference to these inscriptions, he states :—"Now, it is a point of special interest in regard to those early Sanskrit inscriptions of the Archipelago that they are written in a character which is unmistakably South-Indian

and which is practically identical with the early Grantha alphabet used in their inscriptions by the rulers of the Pallava Dynasty. This dynasty, it will be remembered, held sway over the Coromandel coast for a period of nearly five centuries (*circa* 300 to 800 A. D.), and has left us a lasting and brilliant memorial of their rule in that wonderful group of temples and sculptures which is usually indicated by the popular name of 'The Seven Pagodas'.

"There is, therefore, good reason to assume that it was Southern India, and in particular the Coromandel coast, which sent forth emigrants who carried their Brahmanical religion and sacred language to the eastern islands. This conclusion is confirmed by further evidence. The princes of the Pallava Dynasty have, almost without exception, names ending in *varman*; we noticed that in the earliest epigraphical records of Java and Borneo we meet with similar royal names. These documents are undated, but in the later, dated inscriptions of Java it is the Saka era which is invariably used. Now, this era commencing from the year A. D. 78, is essentially the reckoning of Southern India, whereas the Vikrama era—which was in vogue in the North appears to have been unknown in the Archipelago."

The capital of the Pallava empire was at Kānchi, the modern town of Conjeeveram and about 45 miles from Māmallapuram. The site for the latter place was no doubt chosen because it was then the nearest suitable locality for a naval base and it was probably originally connected with the open sea by a backwater which has since become silted up and obliterated by drift sand.

Vaishnava Revival.—When the conservation of these valuable monuments was first taken over by Government many years ago, the Saiva temples were found in a very dilapidated condition. The lingas had been cast out of the shrines, or the floors of the structural buildings torn up for the relics or treasure supposed to have been buried below them. At some time the Saiva religion seems to have suffered a total eclipse at Māmallapuram, due perhaps to its innate corruption and the influence of such religious reformers as Rāmānujāchārya. The comparatively ruined and desecrated state of the Saiva shrines, and the dispersion, overthrow and destruction of the lingas, together with the unmolested state of the Vaishnava temples and symbols, suggest strongly the violent overthrow of the Saiva by the Vaishnava faith.

The Vaishnava heroes and *avatāras* were recognised and adopted by the new sect. A temple enclosure was constructed around the Varāha Temple (No. 14) and a pillared hall built in front of the great pastoral scene found carved on the open rock, named the Krishna Mandapa (No. 18), the style of which, although the lion pillars have been reproduced, is obviously some centuries later than that of the sculptural scene itself. From the complete destruction of the interior of the Rāmānuja Mandapa (No. 16), it would appear that originally this temple was probably the most finished of all and contained the most marked signs of Saiva predominance. Its triple-shrine cells

have been cut out and thrown into one large chamber; the three large tableaux and the figures of the doorkeepers have been carefully obliterated; the *sankha* (conch) and *chakra* (discus), the sacred symbols of Vishnu have been engraved on the end walls of the terrace, and a colonnade, the commencement of a pillared hall similar to the one erected in front of the Krishna Mandapa begun; but strangely enough the old Saiva inscription has been allowed to remain intact on the floor. In all probability, this old record escaped obliteration because the vandals who wrecked the temple were unable to decipher it. The carved representations of the conch and discus are depicted with flames of fire issuing from their sides, a feature which is never met with in early Pallava Art, and clearly denotes that these symbolical figures belong to a much later period.

The few Tamil inscriptions dating from 1073 to 1235 A. D. that have been found at Māmallapuram, indicate that the Vaishnava sect was dominant during that period, and its followers seem to have remained in the ascendant down to the present day. They still occupy the Varāha Temple (No. 14) and the large modern-looking Sthalasayana Temple in the village and keep up the services of their sect therein. The Sthalasayana Temple contains a recumbent image of Vishnu similar to the one in the little shrine cell attached to the west or back wall of the Shore Temple. The Sthalasayana Temple, and the unfinished gateway on the rocky hill above it, called the Rāyala Gopuram, belong to the Vijayanagar period and are not earlier than the sixteenth century.

Method of Excavation.—Very few of the monolithic temples were finished, but the structural buildings appear to have been not only completed but extensively used for worship. It looks as though the original masons and sculptors who executed so many of the earlier monuments passed away before the work was finished leaving the temples without the shrine cells which they were intended to contain and therefore useless for the devotional purposes for which they were designed. However, some of these unfinished examples are very interesting as they explain the method employed in excavating them. The process is illustrated in Plate 1. The first stage was to give the face of the rock a vertical scarp and then to mark out in deeply cut horizontal and vertical lines the area required for the façade. These lines intersect at regular intervals forming a number of cubes about 2 feet square arranged in rows. This method not only made the rock easier to work, but the lines served as a rough guide to the dimensions required. The openings and pillars of the façade were then indicated in outline, and the work of tunnelling out the interior began, and was carried on until sufficient rock had been removed to suit the measurements of the pillared hall and shrine chamber within. Plate 1 (*b*) and (*c*) show the work still further advanced and the lion pillars beginning to take shape, and (*d*) of the same plate illustrates the finished article.

The method of excavating the free-standing temples or so-called *rathas*, was a little different. In this case, the exterior of the edifice had to be cut

and carved before the basement and interior were begun. A suitable rock having been chosen, the first stage was to reduce its size and shape to manageable proportions, the work always commencing at the top of the rock. (Plate 3 (*a*)). In order to provide a safe footing for the masons, and also to serve as rough horizontal guide lines to the different levels of the building, the rock was terraced or stepped. The position of the perpendicular lines was indicated by small square holes cut at regular intervals along the lines of terracing and which also served as sockets for the support of the scaffolding. The big rock sculptures were carved in the same manner. The socket-holes were cut in the top of the rock and stout wooden posts were driven into them to support and steady the scaffolding and rope ladders used below. The two big terraced rocks shown in the background of the photograph illustrated in (Plate 2 (*a*)) show the first stage, and also a reservoir in the foreground situated in the citadel.

Brickwork.—The visitor to the Seven Pagodas will notice a vast number of small flights of steps cut in the face of certain rocks, apparently at random and leading nowhere. In reality, most of these excavations are not steps, but the old footings for the foundations of masonry walls built on the rocky hill-side. In some cases, the remains of the concrete foundations, or the bricks themselves embedded in mortar, may still be seen adhering to these step-like excavations. The foundations of the enclosure walls and revetments to reservoirs were built in a similar manner. Terraced channels or footings were cut in the rock where necessary, and filled in and levelled up with concrete, the wall usually in brick, was then erected on this foundation. At regular intervals, the wall was strengthened with upright stone pillars fixed in socket holes cut in the rock. The tops of these pillars were no doubt connected together by a stone or plaster coping running the entire length of the wall (Plate 2 (*b*)).

The bricks used by the Pallavas were of excellent quality, and measure $10\frac{1}{2}'' \times 6\frac{1}{2}'' \times 1\frac{1}{2}''$, and are similar in make and shape to those found on old Buddhist sites. Concrete was used for the foundations and for levelling up inequalities of the rock surface, also for the floors of the masonry cisterns. Mortar seems to have been used only in the first few courses of the basement of the buildings, the upper portions of the walls being constructed in brick and mud plastered over, just as is the custom to-day.

Plaster Work.—From the earliest times down to the present day, the Indian builder seems to have regarded the use of lime mortar in conjunction with brickwork, as a sheer waste of good material. He prefers to apply the lime in the form of plaster and whitewash to the exterior of the brickwork and for stucco decoration. Traces of old plaster and crude colour work will be found on almost every finished temple at Māmallapuram and in most cases this plasterwork does not represent later additions either. We find exactly the same thing with the older rock-cut monuments of the Buddhists. The beautiful sculptures as we see them to-day, in all probability, look very much nicer

now than they did in the days of the Pallavas; because all of the finished monuments, both rock-cut and structural, were originally covered with a coating of plaster and whitewash to serve as a ground for colour. In many cases, the details of the sculptural figures were modelled in stucco, the actual stone carving merely serving as a framework for the plaster detail. This is one reason why so many of the sculptural figures were left in the rough, simply because they were finished in plaster and were never intended to represent stone sculptures. The carving on the north side of the Shore Temple and also that of the unfinished Arjuna's Penance (No. 20) are good examples of this, as some of the old plaster work still remains and the visitor may see for himself just what it was like. The structural temples were plastered inside and out, and from top to bottom, just as at Conjeeveram.

Palaces.—Many of the architectural details of these temples show that the workmen were not only expert masons and sculptors but also skilled carpenters and wood-carvers. In fact, most of the temples, especially the so-called *rathas*, are simply stone models of wooden buildings. It was only the religious monuments that were hewn out of the imperishable rock. The palaces and important buildings were mainly of timber construction and in style no doubt resembled such buildings as Bhima's and Dharmarāja's *rathas*. It was probably the perishable nature of such buildings which led the Pallava kings to erect their religious memorials in stone. The buildings of the royal household appear to have been located within a walled enclosure or citadel on the summit of the plateau to the north-west of the Lighthouse and where the Lion Throne is situated. Even now, after a thousand years or more there still remains a thick deposit of brick debris and masses of broken concrete on this site. The terraced footings for the foundations of the fort walls, gateways and tank revetments may still be seen cut in the rock in the manner described above. The buildings stood on raised masonry basements, but as no traces of stone pillars, beams or roof slabs have been discovered, we may presume that the superstructures were built mainly of wood, with brick and plaster side walls. Besides the huge rock-cut cistern, known locally as Draupadī's Bath, there was the tank illustrated in (Plate 2 (*a*)), and a small masonry built reservoir with a concrete floor, on the south-east side of the Rāyala Gopuram, so the dwellers on this plateau appear to have had a good supply of water. The only monument on the hill now is the curious Lion Throne illustrated in (Plate 3 (*b*)). The careful manner in which the slab has been dressed seems to indicate that it was prepared for an inscription that was never engraved. The top of the lion's back is carved flat so as to serve as a comfortable seat or throne. The memorial faces the north and the lion's head is purposely turned in that direction and portrayed roaring defiance at some enemy who we may presume resided in that quarter; perhaps the Chālukyas, with whom the Pallavas were constantly at war. As a work of art, it is rather an imposing object and almost Assyrian in severity of style. The modelling of the lion's paws is

particularly good, and the mane is suggested by a number of spiral curls, just like those employed by the Amarāvatī sculptors to indicate Buddha's conventional curly hair. In style and execution, this sculpture is very similar to the lion on which Durgā is depicted riding, in that wonderful scene where the goddess is shown slaying the Buffalo Demon in Temple No. 15, and appears to belong to the same period.

Owing to the lack of ancient inscriptions, we shall have to be guided mainly by the architectural style of the monuments in trying to fix their approximate date. Since the style of one period usually merges into that of the next, it is reasonable to presume that the oldest monuments at the Seven Pagodas, are those which in style and on plan, approximate most closely with those of the Mahēndra period already described and illustrated in Part I. Of these, there are only two really typical examples and they are illustrated in (Plate 4). To appreciate their striking resemblance to the monuments of the earlier period it is necessary to compare the illustrations given here with those appearing in *Part I.*

As many of the monuments are without names, it will be necessary to allot them numbers in describing them in the following pages, and the same numbers will be retained on the map attached to this volume so as to facilitate reference to their actual positions on the site. The old local names are shown in brackets where they occur, for the sake of reference to previous works on the subject.

CHAPTER II.

Description of the Monuments.

No. 1. (Dharmarāja's Mandapa).—Is located at the southern end of the rocky hill on which the Lighthouse stands and faces the east. (Plate 4 (*a*)). In style and on plan it is similar to the Mahēndra temple at Mandagapattu in the South Arcot district. Like the latter, it contains three small shrine cells cut in the back wall for images of Brahmā, Vishnu and Siva: the central shrine which is a little larger than the other two, originally contained a linga to denote the predominance of Siva. The cells are now empty. and the manner in which the figures of the doorkeepers have been carefully obliterated, and the flaming symbols of Vishnu carved on the face of the central pillars of the façade, show that it was originally a Saiva temple that was converted into a Vaishnava one in later times. It is one of the few temples that contain genuine old Pallava records. The inscription in temple No. 1 is engraved on the southern wall of the verandah and is in Sanskrit and according to Dr. Hultzsch (*Epigraphia Indica*. Vol. X) is a duplicate of the one discovered in the so-called Ganēsa temple (No. 12), and proves that, like the latter, Dharmarāja's Mandapa was in reality dedicated to Siva, and that it was founded by a Pallava king called Atyantakāma who named it the "Īsvara (Siva) temple of Atyantakāma Pallava" after himself. As none of these inscriptions are dated, Dr. Hultzsch has tried to fix their approximate age on purely palæographical grounds. I venture to think that this method of investigation when employed alone, is not altogether satisfactory, as it is possible that the inscriptions on a monument may have been engraved long after it was built. Thus, a certain king may have started to build or excavate a temple, but died just before its completion and consecration, and that his son and successor completed the work some years after his father's death, adding an inscription that he, the son, "caused the temple to be built" without any reference to the original author of the work. Therefore, an important factor in determining the age of a monument, is not only the study of its inscriptions, should it possess any, but also its architectural style, particularly with regard to its sculptures and ornamentation.

Another difficulty in identifying these Pallava kings from the inscriptions is that so many of them had not only the same names but even the same epithets, which makes it impossible to know exactly which king is referred to in the inscriptions. Thus in the inscriptions belonging to Dharmarāja's mandapa, the Ganēsa temple, and Dharmarāja's *ratha* (No. 9), each is called *Atyantakāma Pallavēsvaragriha*, *i.e.*, "the Īsvara temple of Atyantakāma Pallava," suggesting that all three shrines were founded by the same king and belong to the same period. Because the florid alphabet employed in the inscriptions

belonging to Dharmarāja's mandapa, the Ganēsa temple, and also to Rāmānuja's mandapa (No. 16), are similar in style to that of the Kānchi inscriptions of Rājasimha, Dr. Hultzsch thinks that Atyantakāma was a surname of Paramēsvaravarman I, the father of Rājasimha, and thus assigns these three temples to about the third quarter of the seventh century. Again, because the inscriptions found on Dharmarāja's *ratha* (No. 9) are in a more archaic style than that employed in those belonging to the three temples cited above, and also because the name Narasimha occurs twice in addition to that of Atyantakāma Pallava, he assumes that the latter must have been also a surname of this Narasimha, whom he identifies with Narasimhavarman I, *i.e.*, Māmalla. He selects Narasimha I in preference to Narasimha II, the son of Paramēsvaravarman I, merely on account of the archaic style of the alphabet employed in the epigraph. Had the latter been engraved in the florid style of alphabet he would doubtless then have selected Narasimha II for Atyantakāma Pallava, regardless of the architectural style of the monument itself.

It will thus be seen then, that the identification of these different kings and fixing the age of the monuments they founded on palæographical evidence alone, is not a particularly reliable method of investigation. Dr. Jouveau Dubreuil, in Vol. I of his "*Pallava Antiquities*," appears to be of the same opinion for on page 74, he states as follows:—"Thence, we have come to the conclusion that the form of the alphabet is not an absolute test for the determination of the age of antiquities and that inscriptions which by their alphabets, seem to belong to different epochs, can, in reality, be contemporaneous." He also shows that during the Rājasimha period, at least two different kinds of alphabets were in use at the same time, and that a difference in the evolution of the letters does not necessarily denote a difference in age. Thus the florid Grantha-Pallava alphabet is really older than the simple Grantha-Pallava (of the Panamalai inscriptions), and was perhaps devised some fifty years prior to Rājasimha's reign. But as it was highly embellished and little used, it was handed down without any change, and the sculptors who employed this alphabet were satisfied with copying the old characters instead of embellishing the writing of their days.

On plan, in style and even in dimensions, Dharmāraja's mandapa bears such a remarkable resemblance to the Mandagapattu temple, described and illustrated in *Part I*, that had the former been discovered anywhere else in the Pallava country, and without its inscription, it would have been assigned to the Mahēndra period without any hesitation whatever, by architects and epigraphists alike. (Plate 5 (*a*)). Both temples are triple-celled Saiva shrines and the floors of these little cells are raised about 2 feet above the level of the pillared hall in front. Each cell is approached by a flight of rock-cut steps, the first step being rounded or half-moon shaped, a feature common to the Mahēndra style. The façades have the usual openings and massive pillars with corbel capitals and the doorkeepers face the front. Those of Dharmarāja's

mandapa have been defaced and only the outlines of the figures remain. They were placed in panels on each side of the entrance into the central shrine. The doorkeepers in the Mandagapattu temple are placed in large panels, one at each end of the façade. The position of these figures is the only real difference between the two temples. In all other respects they are so much alike, that they might have been excavated by the same workmen. Triple-celled Saiva temples were a common feature of the Mahēndra style and occur not only at Mandagapattu, but also at Bezwada, Mogalrājapuram and Undavalli.

Moreover, if we compare the primitive style of Dharmarāja's mandapa with the advanced and ornate style of the so-called Ganēsa temple (No. 12), it is difficult to agree with Dr. Hultzsch that these two temples belong to the same period and were founded by the same king, *i.e.*, Paramesvaravarman I (Māmalla's grandson). On purely architectural grounds, Dharmarāja's mandapa would appear to represent one of the first rock-cut temples undertaken by Māmalla in his new sea-coast town; also, that the men he employed for the work were probably masons who had been formerly in the employment of his father. Hence, the striking similarity of the style and plan of this temple with those founded by his father, the great Mahēndravarman I.

The fact that so many of the rock-cut temples have been left unfinished, clearly shows that they took many years to complete, and no doubt the constant wars with the Chālukyas helped in this. It is therefore possible and extremely probable, that Dharmarāja's mandapa was excavated during Māmalla's reign but not consecrated until after his death. If Atyantakāma, as Dr. Hultzsch maintains, was a surname of both Māmalla and Paramesvaravarman I, then the latter may have named the temple not after himself, but after his illustrious grandfather for all we know to the contrary.

No. 2. (Kōtikal Mandapa).—Is situated on the north-western side of the same hillock as No. 1 and faces the west. (Plate 4). It is a primitive little temple originally dedicated to Durgā. In style, dimensions, and on plan it bears a strong resemblance to the Mahēndravadi temple in the North Arcot district described in *Part I*, the only real difference being in the type of doorkeepers guarding the entrance into the shrine chamber. In the Mahēndravadi temple the doorkeepers are two-armed male figures of the usual kind common to the Mahēndra period and face the front. In Temple No. 2, the doorkeepers are portrayed as female figures because the shrine was dedicated to Durgā. However, their pose and dress are similar to those of the usual male figures. and the one on the proper right. of the entrance is shown holding a club and the other a bow. But both face the front and this is an important point because it indicates that the monument is an early one approximating closely to the Mahēndra period. In the later Pallava temples we only get side views of the doorkeepers as they are then depicted facing the entrance into the shrine chamber. The plan of this little Durgā temple is also similar to those of some of the smaller temples at Bhairavakonda and Mogalrājapuram

and thus helps to prove my theory that the temples at the two latter places really are Pallava monuments of the Mahēndra period. Durgā was evidently a popular deity with the Pallavas as we find two temples at the Seven Pagodas specially dedicated to this goddess and a number of beautiful sculptural representations of her adorning some of the interiors of the larger temples. There are also a number of crudely fashioned figures of the same goddess and her lion carved on some of the isolated rocks near the Shore Temple facing the sea. On plan, the temple consists of a hall 21′-10″×8′-0″ and 8′-3″ in height. (Plate 5 (*b*)). The ceiling is supported by two rock-cut pillars in the typical Mahēndra style. The floor of the little shrine cell is raised 2 feet above the level of the hall and is approached by steps, the first one being half-moon shaped as in the Mahēndravadi temple. In fact, the style, plan and dimensions of these two temples are so remarkably alike that one is inclined to think that they must have been excavated by the same workmen as they both appear to belong to about the same early period.

In the doorway, and above the façade and also on the floor of the terrace there are socket holes cut in the rock for wooden posts, showing that the shrine was fitted with a door and the front provided with a wooden verandah. Many, if not all, of the shrine entrances were provided with wooden doors.

No. 3.—At a short distance to the south of the Durgā shrine just described, is a large five-celled Saiva temple facing the west. (Plates 6, 7 and 8). On plan and in dimensions, this temple is similar to the Mahēndra temple at Pallāvaram in the same district. (Vide *Part I*, p. 16 and Plate III). Both temples contain the same number of shrine cells cut in the back wall and have pillared halls in front of similar dimensions. Each hall has two rows of pillars containing four pillars in each row. The convex cornice and simulated roof line of the Pallāvaram temple was never completed but the positions of the nine spade-headed finials for the row of little dormer windows ornamenting the cornice are shown, and the number of simulated windows is the same in both temples. Had the front of the Pallāvaram temple been completed it would have had a similar appearance to that of Temple No. 3 the main difference being that the latter was excavated by more skilful masons who were able to improve on the original design by introducing pillars of better proportion and more elegant shape. However, the front row of cubical pillars still retain their corbel capitals with the roll ornament on the underside as in the earlier examples. The style of the dormer window ornament along the front of the cornice and the frieze of sacred geese below it, the little flights of steps leading up to the five shrine chambers and the simple mouldings above and below their doorways, and last but not least, the style of the doorkeepers carved on each side of the little doorways, are typical features of the Mahēndra style.

The figures of the doorkeepers are particularly interesting. They face the front and some are depicted with one hand raised in the act of adoration and the other resting on the hip and resemble the doorkeepers belonging to the

Dalavānūr temple. Others are shown armed with big clubs and are similar in style to the doorkeepers in the Trichinopoly temple. They are shown wearing the usual jewels, ornaments and lofty head-dress, but a remarkable feature about the latter is, that some of the doorkeepers are portrayed with bull's horns decorating their head-dress, (Plate 26 (*a*)) in exactly the same manner as we noticed in some of the figures of doorkeepers appearing in the rock-cut temples at Vallam, Mogalrājapuram and Bhairavakonda described in *Part I.* The fact that representations of this curious head-dress and also of the sacred geese frieze are first met with in the Saiva temples at Mogalrājapuram and Bhairavakonda not only strengthens my theory that these temples were excavated by the Pallavas before they lost their northern province and were driven south by the Chālukyas at the beginning of the seventh century, but it seems to indicate that some of the masons employed at Māmallapuram originally came from the North. According to Dr. Hultzsch, some of the Sanskrit inscriptions found on these temples also suggest the same idea as he found a northern alphabet employed along with a southern one. Although Temple No. 3 contains so many architectural features common to the Mahēndra monuments, its advanced style of architecture indicates that it belongs to a later period and was in all probability, excavated during Māmalla's reign. We have noticed that the front row of pillars, although of better proportion, are still more or less in the Mahēndra style, but the pillars in the back row and in line with those of the front are in a totally different style. (Plate 7). The shafts of these pillars are round in section, slightly fluted and have a semiclassical appearance. They have round cushion-shaped capitals supporting corbelled brackets, the underside of which is decorated with the roll ornament. This curious double capital supports the flat roof of the hall. It is a clumsy arrangement, and not in very good taste in a stone building as the additional bracket is unnecessary and could have been easily replaced by a flat abacus to support the architrave as in classical architecture. I venture to think that this unnecessary addition to the capital merely indicates, as so many architectural features of these Pallava temples do, that this variety of pillar is really a copy of a carved wooden post. Wooden posts of this type supporting timber-framed roofs, are depicted in the Ajanta Frescœs and were familiar to the Buddhists long before the Pallavas started excavating rock-cut monuments. Similar stone pillars, but square in section, are found in some of the temples at Bhairavakonda, and little pilasters in the same wooden style are carved on each side of the shrine entrance of the Trichinopoly temple, showing that they were known to the earlier Pallavas even if they did not often use them as supports in their rock-cut temples. It was only in later times, during the intermediate period, when the sculptors with long practice had become more proficient in their art, that they dared to introduce these elegant but doubtful supports into their monolithic temples as one of the leading features of the architectural style of that period.

The round socket holes cut in the floors of the five little shrine cells show that a Siva *linga* was originally enshrined in each cell. These were no doubt destroyed by the same vandals who engraved the comparatively modern Vaisnava symbols of the conch and discus on the end walls of the terrace outside. Each cell has a small plain square panel about 3 inches deep, cut in the back wall. The steps to these shrines are unfinished.

No. 4. (Trimurti Temple).—This is a neat little triple-celled temple dedicated to the three great gods of the Hindu Triad—Brahmā, Vishnu and Siva and faces the west. The ornamentation is more finished than in many of the other examples and the work is in excellent preservation. (Plate 6, fig. *b*). Unlike most of the other temples, it has no portico or verandah in front, but merely a prominent convex cornice decorated with the usual dormer window ornament projecting over the three doorways with their flanking panels containing bas-relief figures of six doorkeepers.

The vase-finials decorating the simulated roof line, and the spade-headed finials above the row of dormer windows along the cornice, lend a highly ornamental finish to the façade. Owing to want of space between the three doorways, the panels for the figures of the doorkeepers are very narrow and the sculptors were forced to depict these figures more or less in profile. Four of these doorkeepers are of the usual kind, but the two guarding Brahmā's shrine at the northern end of the façade are shown as bearded *rishis*. At the southern end there is an extra panel or niche containing an eight-armed bas-relief figure of Durgā trampling on the head of a buffalo. In her two upper hands she holds the discus and conch which are portrayed without flames of fire. Above the niche supported on two plain wooden-like pilasters of the usual kind, is a carved representation of a dwarf-mounted *makara-torana*, similar in style to the one appearing in the Mahendra temple at Dalavanur described in *Part I*. Like the three doorways, the niche is provided with a small flight of steps. The steps leading up to the central shrine which was dedicated to Siva are of the moon-shaped variety mentioned above. The pilasters flanking the panels and doorways represent plain square pillars of the prevailing wooden style of the place with corbel brackets supporting the eaves, below which is a frieze of sacred geese like the one we noticed in Temple No. 3.

The central shrine contains a bas-relief carved on the back wall representing a four-armed standing image of Siva. In the upper right hand he holds an axe and in the upper left a rosary. Of the other two hands, one rests on his left hip and the other is raised in the blessing posture. Two male worshippers kneel at his feet and two goblins or *ganas* are depicted flying above the god's head. In the cell to the proper right is a similar four-armed figure of Brahmā. In his upper right hand he holds a flower and in the upper left hand a ring. The two other hands and the attendant figures above and below are similar in style and pose to those depicted in the central shrine. The lower portion of the figure is not quite finished. Engraved on the top step leading

into this cell, Dr. Jouveau Dubreuil found an inscription containing the one word "Mālla," in characters similar to those of the inscriptions of Narasimhavarman I (Māmalla), and therefore he thinks that this temple must be attributed to this king. In the cell on the proper left there is a four-armed standing figure of Vishnu similar in execution to the other two images. In his two upper hands he is shown as holding the conch and discus which are depicted without flames of fire.

In front of the temple is a large circular rock-cut cistern known locally as the "Gōpīs' Churn."* It measures 8 feet 7½ inches in diameter and is 5 feet deep. It was probably used for the distribution of milk to pilgrims during festival times. The name "Sri Kadhīti" in Pallava characters, is faintly engraved on the flat surface of the rim of the cistern.

No. 5. (Draupadī's Ratha).—This pretty little shrine and the one adjacent to it known as Arjuna's *ratha*, stand on the same platform and are carved out of the same rock and therefore obviously belong to the same period. The style of the rock-cut platform is unusual and designed so as to suggest that the temples rest not on the ground but on the backs of a row of recumbent lions and elephants alternately, a motif borrowed from Buddhist art. The temple faces the west and was dedicated to Durgā. Like most of the other so-called *rathas*, it is a stone model of a building mainly constructed in wood. The style of the little pilasters with their corbel brackets supporting the curved eaves clearly denotes their wooden origin. The shape of the roof too, with its ornamental ridges and corners simulates a square domical timber framed roof of (single) convex curvature, most simple in outline like the thatched roof of a Bengali hut, and terminating above in a flat top 2½ feet square, originally crowned with the stone vase-shaped finial that now stands at the foot of the steps leading up to the platform. The four corners of the roof are ornamented by elaborate scroll work at the base, extending along the ridges of the roof to the top. The style of this carving appears to simulate embossed metal work, and no doubt, the roof of a wooden building of this kind was covered with thin copper sheets like some of the temples on the West Coast at the present day. A handsome and very florid *makara-torana*, similar in style to the one over the figure of Durgā in Temple No. 4, is carved in bas-relief on the façade above the doorway and also above the corresponding central panels on the other three side walls of the shrine. Close under the eaves is a frieze of goblins or *ganas*.

The shrine is entered by a small doorway 6′-7″ × 2′-10″ between plain square pilasters assimilating in style to the rest in this locality. In the doorway there are two mortise holes or sockets for door-posts cut in the underside of the lintel, but none below to correspond. On each side of the entrance is a plain rectangular panel containing a graceful figure of a female doorkeeper. These figures are rather less than life-size and in style and pose resemble those belonging to the other Durgā Temple No. 2. The figure on the proper

right holds a sword and the one on the left a bow. Within the little cella is a bas-relief standing figure of Durgā. The goddess is four-armed and portrayed standing on a lotus pedestal with two male worshippers kneeling at her feet and four little *ganas* flying above her head. The style of this image is similar to that employed in the execution of the figures in the Trimūrti temple and appears to belong to the same period, *i.e.*, Māmalla. Durgā is portrayed wearing a lofty head-dress and the usual jewels, girdle and anklets, also a band or ribbon supporting her breasts. This latter article of dress seems to be peculiar to figures of this goddess and her female attendants. Representations of Lakshmī, Parvatı and other female figures all more or less in the nude, met with in Pallava art, are depicted without this ornament. She holds the discus in her upper right hand and the conch in the left (broken). The lower right hand is raised in the attitude of imparting protection (*abhaya-mudrā*) and the lower left hand rests on her hip. The kneeling worshipper on Durgā's proper right is portrayed cutting off his long tresses with his sword as an offering to the goddess, a custom still in vogue in Southern India and performed by both men and women. It is a rather striking figure and occurs again in a panel representing the same goddess in the so-called Varāha Mandapa (No. 13). Two of the four flying goblin or *gana* figures are depicted armed with a weapon exactly like a *kūkri*. Each of the three panels on the back and side walls contains an unfinished four-armed standing bas-relief figure of Durgā similar to the one in the shrine cell, except that the one on the back or east wall is portrayed standing on the head of a buffalo, and would therefore seem to represent a Mahishāsuramardini, like the one belonging to the Trimūrti temple described above.

In front of the temple and facing the north is a huge rock-cut figure of Durgā's vehicle. the lion. It is an imposing object and somewhat Assyrian in style as its mane is represented by a series of little spiral curls like tiny volutes. Only the root of the tail is carved, and the upper surface of the back is smoother and more worn than the rest of the stone suggesting that it may have been used for some purpose. ((Plate 10 (*a*)).

No. 6. (**Arjuna's Ratha**).—This temple stands next to Durgā's shrine and like the latter faces the west (Plate 10 (*b*)). It was dedicated to Siva and contained one of those curious *trisūla* heads of that deity illustrated in Plate 16. Some years ago when the drift sand was being removed so as to expose the plinths of these five monuments, popularly called the "Five Raths," I found this broken head of Siva, and the finials belonging to the Durgā and Arjuna temples buried in the sand in front of the platform on which they both stand. I also discovered another *trisūla* head buried in the sand in front of the Saiva temple attached to the back or west wall of the Shore Temple, which has since been restored to its original place. In both cases, the horns and central spike of the *trisūla* or trident emblem, were found broken. However one perfect example of this curious object of worship still remains as the crowning

ornament above the curved bargeboard at the southern end of the waggon-roof of the so-called Ganēsa temple, (Plate 16). These trident heads were set up in the shrine cells in place of the usual Siva *lingas*. The custom appears to have been peculiar to the Pallavas as such images do not seem to have been discovered elsewhere. They doubtless indicate some special Saiva cult that flourished during this period and the horned head-dress worn by some of the figures of the doorkeepers already referred to, is apparently connected with the same cult. (Plate 26 (*a*)).

The temple represents a stone model of a small two-storeyed building crowned with an octagonal bell-shaped dome mainly of timber construction. The pillars or pilasters are a little different and more ornamental than those of the Durgā shrine. Those at the four corners of the temple are octagonal in section instead of square, have cushion capitals and the corbel brackets supporting the eaves are decorated with little rampant lions, and the two pilasters in the entrance hall have typical lion bases. The curved eaves are decorated with the usual dormer window ornament, with a frieze of little goblins or *ganas* below it. The portico in front of the ground floor has been cut away to an alarming degree, so much so, that two modern cut-stone pillars had to be fixed in the entrance to give additional support to the mass of cracked stone above. Owing to want of room in front, the usual figures of the doorkeepers to guard the temple had to be accommodated in panels or niches at the angles of the back and side walls. Those on the north and east sides are portrayed in profile while those on the south side face the front. With the exception of one figure on the east side depicted holding a bow, all the rest are shown without weapons and with one hand raised in the act of adoration. The spaces between the panels containing the doorkeepers are filled with more panels containing bas-relief male and female figures. In the central panel carved on the east wall of the temple is a figure of Indra riding on an elephant. On the south side, the central panel is occupied with a figure of Siva leaning on the bull Nandi, and the one on the north side contains a four-armed figure of Vishnu and Garuda. The remaining panels are filled with pairs of nicely executed attendant male and female figures.

The walls of the upper storey are also divided up into panels representing the window openings of a square hall. In these are portrayed pairs of bas-relief human figures similar in style to those below. The upper cornice is like the lower one but has beneath it a frieze of sacred geese instead of the goblins. The geese are similar in style to those which we noticed in Temples Nos 3 and 4, and also at Mogalrājapuram (*Vide* Part I. Plate VII).

The shrine cell within the portico has not been fully excavated, but apparently it was used for worship, as the *sōma sūtra* or outlet for sacrificial water on the north side has been made although unfinished outside. There are also traces of old plaster and red colour work showing that the temple was once coated with this material. Like the Durgā temple, the upper mould-

ing of the plinth was broken during the excavation work, and the sculptors had to cut a number of little mortise holes along the broken portion so as to repair the damage with a fixed stone moulding. The back portion of the platform seems to have also come in for repairs. Here, too much rock was cut away by mistake and had to be made good with rubble masonry in mortar, the four figures of the lions and elephants being carved in the round and fixed in mortar against the plinth of the platform, instead of being rock-cut like the rest. It may have been partly to hide this faulty work that the temple was plastered over from top to bottom, just like an ordinary masonry built temple. At the back of the temple is a colossal but unfinished figure of the bull Nandi, the vehicle of Siva. As there was no available rock in front of the temple, the sculptors had no alternative but to carve this huge figure at the back of it, but they took care to portray the animal's head facing the shrine in an orthodox manner. (Plate 10 (*b*).)

The boldly projecting cornice overhanging the ground floor is fully developed here, and is carried all round the shrine including the portico. As usual, it is decorated with the dormer window ornament, each semi-circular or "horse-shoe" dormer containing a little human head in relief. This design simulates the roof of an upper storey of a long waggon-headed monastic type of building mainly of wooden construction containing a number of cells or cubicles within. The latter are shown with gable or dormer windows arranged in pairs along the eaves, through which the inmates of the building are depicted looking out. As this ornament first appears in Buddhist art, it is usually called the "chaitya window ornament", because the Buddhists decorated the windows, doorways and gable ends of their *chaityas* (churches) and *vihāras* (monasteries) with horse-shoe shaped bargeboards of this type. The prevalence of this design in almost every temple at Māmallapuraṁ, seems to indicate that timber-framed roofs of this pattern, were the usual method of roof construction employed at this period for all the larger and more important buildings, both civil and religious.

In style and on plan, the first floor or storey, like the cornice below it just described, seems to be nothing more or less than a stone model of a portion of a *vihāra* or monastery mainly constructed of wood. With the Buddhists, the *vihāra* usually consisted of a large hall (*sālā*), square or oblong on plan surrounded by a row of small dormitory or meditation cells. In the rock-cut specimens there is generally only a single floor, but examples of two-storeyed *vihāras* are not wanting. In the wonderful bas-reliefs of the great *stūpas* of Sānchi and Amarāvati, there are several sculptural representations of many-storeyed *vihāras* and similar structures of wooden construction and they closely resemble in outline and detail the simulated buildings portrayed on the first and second floors of this temple. The floors or terraces on which the rows of domical cells stand are provided all round with a balcony railing or balustrade ornament, the beam ends of the railing being carved into griffins' heads. Three cells or rooms, connected by a continuous covered passage, are

portrayed on each side of the big central hall, and with their doorways apparently facing the latter. The cells at the four corners of the terrace are square on plan and have domical roofs, while those in the centre of the row are oblong on plan and have waggon-headed roofs like Buddhist *chaityas*. The wooden origin of this simulated group of monastic-like buildings is particularly noticeable. The curved roofs are shown resting on big square-headed transverse tie beams which are bolted to stout upright posts rising from the floor, by horizontal wooden pins. The beam ends are depicted protected from the weather by horse-shoe gables of the usual kind. The underside of the curved eaves of the roof is usually shown supported by a row of tiny brackets or modillions, forming a kind of frieze or string-course below the eaves. In some examples, this ornament is quite plain like the dentils of the Corinthian Order, in others, they are carved so as to represent a frieze of geese or goblins. Originally, these little square-headed projections seem to have represented merely the protruding ends of the transverse rafters supporting the wooden ribs of the curved roof. Every feature of these simulated buildings points to a wooden origin. The real edifices which the sculptors took as their models, were probably erected on masonry-built platforms with wooden superstructures. They had timber-framed walls with the interstices probably filled in with brick and plaster. The door and window frames, pillars, pilasters and the roof were all executed in timber and the ornamentation was mainly in wood-carving and stucco. The roofs seem to have been covered with thin sheets of copper, strengthened at the angles and ridges with embossed metal plates, probably copper gilt. The buildings were no doubt white-washed and the ornamentation picked out in a few simple colours. The summit of the roof and tops of the gables were adorned with lofty finials, probably of wood painted or gilded. These buildings must have presented a very picturesque and imposing appearance as they were sometimes very lofty structures. According to some of the old Buddhist historians, the *chaityas* and *vihāras* were often decorated with coloured flags and banners, and illuminated at night by hundreds of little lamps during festival times. It is usual to refer to buildings of this kind as Buddhist in style, but there is really no reason why the Brahmans of this period should not have also erected similar wooden buildings in the service of their religion, and to have sometimes copied them in stone as they appear to have done here at Māmallapuram. The fact that no remains of such wooden buildings have been discovered does not prove that they never existed. It should be remembered that it is only the rock-cut and masonry-built monuments of the Buddhists that have survived. Of the thousands of wooden *chaityas* and *vihāras* that we know that they erected all over Northern India and in a few places in the South, not a vestige remains today.

The plan and arrangement of the group of simulated buildings portrayed on the top terrace, is a repetition of the one below, except that here, the central hall or *sālā* is octagonal on plan instead of square and is roofed with

an octagonal bell-shaped dome. The wooden origin of the latter is very obvious. The cross beams carrying the curved framework of the dome are shown arranged like the spokes of a wheel with the square-headed ends projecting outside and protected by horse-shoe gables. These cross beams are fastened to stout upright posts springing from the floor of the hall in the same manner as we noticed in the lower storey. The eight ribs of the dome are carved ornamentally and end as usual in florid scroll work spread over the angle joints of the dome, presumably, in imitation of embossed metal work. The *kalasa* or ornamental vase-shaped stone finial that originally crowned the dome is now lying on the ground in front of the temple. It was probably removed by treasure seekers.

No. 7. (Sahadeva's Ratha).—This quaint monument stands a few yards in front of the one just described and faces the south. It was apparently started in honour of Indra but never finished. It consists of a ground floor on a raised plinth with a partly excavated shrine cell and a pillared portico in front. Above these are two upper storeys, the top one being crowned with a waggon-headed roof. On plan, all three floors are apsidal-ended like Buddhist *chaityas* or churches, a feature that we do not meet with in any other temple here. Like all the other so-called *rathas*, it is obviously a stone model of a building mainly of wooden construction. (Plate 11.)

The pillars supporting the roof of the porch have the usual lion-bases and the pilasters on either side of the shrine doorway have elephant-bases. The elephants are depicted guarding the entrance in place of the usual figures of doorkeepers. These elephant warders and the huge monolithic elephant standing on the east side of the temple indicate that the temple was sacred to Indra, as the elephant is the *vāhana* or vehicle of that deity. Had it been possible, no doubt the sculptors would have portrayed the life-size model of this animal facing the shrine entrance but there was no available rock on this side for the purpose.

On plan and in style, the ground floor represents an oblong hall with an apse at its northern end and an entrance porch at the other. The walls are mainly composed of simulated plain wooden-like pillars with corbel brackets carrying the roof and cornice, suggesting that in the original wooden building from which this stone model was copied, the interstices between these pillars were filled in with brick and plaster. The overhanging convex cornice is decorated with the usual dormer window ornament and is carried round the whole building including the porch, and prominently marks the division between the ground floor and the first storey or terrace. Standing on the latter, we have a second but smaller model of the apsidal-ended hall below, surrounded by a continuous row of simulated monastic buildings similar in style and on plan to those portrayed on the upper storeys of Arjuna's Ratha described above. The top storey is again, a smaller replica of the one immediately below it, except that in this case, the central hall is provided with a long

waggon-roof and ornamental gable end. In a design of this kind, it was impossible to show the style of the roofs of the two apsidal-ended halls below, but had it been possible to do so, no doubt these too would have been shown roofed in exactly the same manner. The waggon-roofed apsidal hall on the top terrace seems to be a very accurate little model of a Buddhist *chaitya*, and the style of its gable end façade confirms this assumption. On plan, in style and roof construction, the Buddhist *chaitya* was exactly like this model in outward appearance. The *chaitya* always contained in the apse a *dāgaba*, or in later times a conventional image of Buddha, as the object of worship, and the gable end façade of the building usually had three round-headed doorways, the central one being loftier than the side ones, and affording a distant view of the *dāgaba* at the far end of the interior. The horse-shoe gable of the model contains not only a representation of the three doorways but also a *dāgaba*-like object is carved as a centre piece in the middle of the big doorway. Below the miniature *dāgaba*, the sculptors have depicted in a conventional manner, the two rows of internal pillars flanking the nave and apse and supporting the ribs of the roof, one of the leading features of the *chaitya* plan. The subject has necessarily been treated in a very conventional manner as the design had to serve as a sculptural ornament to fill up the blank space of the rock-cut façade of the model, but there is little doubt as to the origin and meaning of the ornamentation.

Although at first sight, the presence of the apsidal halls and waggon-roof appears to indicate the *chaitya* as the prototype of this temple, the simulated groups of monastic buildings ranged round the two terraces suggest the *vihāra*. In fact, the temple possesses architectural features borrowed from both styles. With the Buddhists, the *chaitya* was sometimes surrounded by a *vihāra*, and the entire group of such apartments for a community of monks, was then called a *sanghārāmā*. So perhaps, the temple represents a stone model of a *sanghārāmā*, portrayed in a conventional manner to suit the requirements of a Hindu temple.

No. 8. (Bhīma's Ratha).—This waggon-roofed monument stands third from the north in this group and close to No. 7, and is illustrated in Plate 12. It is a stone model of a large barn-like building mainly of timber construction. On plan it measures 42 feet in length, 25 feet in width and is about 25 feet high. It is a most unusual type of building for a Hindu temple, that is, if it was ever designed as a temple. Like most of these rock-cut monuments it was never completed, and contains no shrine cell or images to indicate its origin or use. It was evidently intended to have on the ground floor a large oblong pillared hall or *mandapa* open on both sides. The pillars are of the typical lion-based variety. The two ends of the hall face north and south respectively, and here the lower rock has only just been roughly blocked out into cubes ready for cutting. In these free-standing monuments, the sculptors always began the work at the top, carefully finishing the details and ornamen-

tation before commencing work lower down. The main object of this, of course, was to protect the finished work from accident. The central portion of the hall like the two ends, has been left unfinished and is blocked by a great mass of rock. It is fortunate that it is so, because had this rock been removed the weight of the upper floor would certainly have crushed the hall below. As it is, a big vertical crack extending from top to bottom has split the work into halves, which, with one or two other cracks, may well have stopped the work. These cracks have since been pointed with cement and modern cut-stone pillars have been inserted in the western verandah to give additional support to the weight above.

The cornice overhanging the ground floor is nearly completed all round. It is ornamented with the usual row of simulated dormer windows containing little human heads in relief, and marks the division between the ground floor and the upper storey. The latter is designed to represent an open terrace, oblong on plan and enclosed by a railing or balustrade. Standing in the centre is a large waggon-roofed hall also oblong on plan, and surrounded by an open circumambulatory passage and a row of simulated monastic buildings ranged all round the outer edge of the terrace. These miniature buildings represent a row of cells or apartments connected together by a continuous covered passage running all round the outer edge of the terrace and in style are similar to those portrayed on the upper floors of the last two examples described above. The central hall is provided with five unfinished balcony windows on each side, a few of them containing unfinished human figures in relief, and an entrance at each end. The northern gable end façade is the most finished and shows a square-headed doorway surmounted by a dormer window cornice and a little *dagaba*-like object above, the circular base of which is enclosed by a carved railing ornament. Six wooden-like pendant brackets with carved griffins' heads are portrayed as decorative supports to the underside of the massive horseshoe bargeboard of the gable. The wooden origin of this architectural feature is particularly obvious. The boards are decorated in relief with lotus flowers, beading, and scroll work at the lower ends. The finials crowning the gable tops are missing. These were probably of the spade-headed variety like those adorning the little dormer windows below. The roof ridge of the hall was provided with no less than eighteen vase-shaped stone finials all of which are missing. From the number of little mortice holes cut in the bases of these finials, it is clear that most of them were carved in the round and fixed after the excavation work was finished.

In the famous bas-reliefs of the great *stūpas* of Sānchi and Amarāvati, we have several representations of monasteries, city gateways, and royal palaces built in a style similar to that portrayed in this monument, and the same sculptures show that this type of waggon-roof was the usual method of roofing all buildings of any importance in those early days, only that at that period, the buildings were executed in wood, the substructures alone being of masonry

or brick construction. If we examine Bhīma's Ratha carefully, we shall find that this building too really represents a stone model of a similar wooden structure. Its wooden origin is particularly obvious in the treatment of the upper storey. As if to purposely make it quite clear that it is a model of a wooden building, the sculptors have reproduced at great pains the ends of the square-headed transverse beams that would be required to support the curved rafters of the roof in a wooden building of this kind. In order to screen what would otherwise have been a very unsightly feature in the outward appearance of the roof and also to protect the beam ends from the weather, the latter are provided with small projecting horseshoe gables of the usual type. It will also be noticed that below each cross beam there is a balcony window flanked by two sturdy upright pillars with bracket capitals. In a wooden building, these pillars would be necessary to give extra support to the great weight of the roof beams at these five places. The curved brackets that would be required to support the projecting eaves of the heavy roof, were it a wooden building, have all been laboriously reproduced here in stone without any structural advantage being gained. Again, the style of the great horseshoe bargeboards at the gable ends and the simulated monastic-like apartments depicted on the terrace, leaves no room for doubt that the monument is a stone model of a wooden building. It is too unfinished for any useful speculation as to the real purpose for which it was designed, but we may be quite certain that it represents a Hindu memorial and not a Buddhist one, in spite of the fact that it does not contain a single architectural feature which can, strictly speaking, be classed as orthodox Hindu in style.

Previous to the seventh century of our era, Indian builders, sculptors and wood-carvers had been mainly employed in erecting, or excavating out of the living rock, religious buildings for the Buddhists. On the decline of Buddhism about this same period, we find Brahmanism reasserting itself in the form of Hinduism. Thus we find that these old builders of Buddhist monuments, or their direct descendants, no longer receiving employment from their former patrons, offered their services in the cause of the new religion. When working for the Buddhists, these builders were called upon to erect three standard types of religious buildings:—*Stūpas* or *dāgabas* (relic mounds and simulated tombs), *chaityas* (churches), and *vihāras* (monasteries). Hinduism, at that early period, had not had time to evolve any definite standard type of religious buildings of her own, so the question of designing appropriate edifices seems to have been left to these former builders of Buddhist monuments. Having no other precedent than Buddhist art to guide them, it is not surprising to find the buildings for the new faith resembling those of the Buddhists, both on plan and in design. This so-called Bhīma's Ratha is an excellent example of this type of building, and its roof would seem to be the prototype of the ordinary waggon roof of all the great *gopurams* or gateways of the South Indian Temples.

No. 9. (Dharmarāja's Ratha).—This designation has as little connection with this monument as the popular names bestowed upon the other monuments here. It is the only temple regarding the real origin of which a definite statement can be made. For it is recorded in two inscriptions found on the building that it was "the Īsvara (Siva) temple of Atyantakāma Pallava." Atyantakāma, according to Dr. Hultzsch, is the same as the Pallava king Narasimhavarman I, surnamed Māmalla. That the temple was dedicated to Siva appears also from the sculptured panel in relief in the cella of the upper storey and from the fact that this shrine once contained a *linga.*

It is a lofty pyramidal-roofed temple with three storeys of cell-terraces above the ground floor, rising to a small octagonal dome and faces the west. In style it resembles Arjuna's Ratha. Like most of these temples, the ground floor, which was always left to the last, is unfinished. (Plate 14.)

On plan, the ground floor consists of a pillared hall about 28 feet square standing on a high plinth, with a projecting portico facing the west. The plinth mouldings are plain and simple, the top one alone being decorated with little figures of elephants and conventional lions. The unfinished pillars of the hall are of the typical lion-based variety with plain corbel capitals. The angles of the hall are left solid and form four massive square piers, the front faces of which are decorated with tall narrow rectangular panels, each containing in high-relief a life-size figure of a male devotee or a four-armed image of Siva. There are eight of these panels in all and most of them have brief Sanskrit labels engraved in florid characters above the panels. There is nothing very remarkable about these figures except the one portrayed in the north-eastern panel. Here we have a curious four-armed hermaphrodite figure representing Siva in the form of Ardhanārī. It is one of those curious creations of the Indian mind which are due rather to phantasy than to good taste and may perhaps be traced to the conception of the Sākta doctrine that only when combined with Sakti is Siva capable of discharging his divine functions. This belief in the inseparable union of the masculine and feminine elements in the Creator, has thus resulted in a phantastical image of which the left half represents the female (Pārvatī) and the right half, the male (Siva). The jewellery and ear-ornaments are carefully distinguished in detail, those on the left side being purely feminine ornaments and those on the right ornaments appropriate to males. The upper right hand holds the axe and the lower is depicted in the posture of protection (*abhaya*). Of the two left arms the upper one is richly decorated with bangles and the hand holds a flower, while the lower one is empty and hangs down to the side. It will be noticed that a hooded cobra serves as a girdle.

Above the ground floor is a continuous projecting cornice all round, in the usual style, decorated with the dormer window ornament, and between each pair of dormers is a gargoyle waterspout. These gargoyles are carved to represent the heads of men, monkeys and demons. Unfortunately most

of them are broken and some are unfinished. I do not know of any other ancient Hindu temple possessing this unique architectural feature. Immediately below the cornice is a frieze of dwarfs or *ganas* bearing a long garland hanging down in graceful festoons between them. This is only on the west or front face, and for the length of a single panel along the north and south faces; the rest of the frieze consists of the usual *gana* figures met with in this design. There is a semi-classical style about this frieze indicating its Buddhist origin.

The plan of the first storey or terrace, consists of a square simulated hall with an unfinished shrine and portico facing the west. It is surrounded by an open passage and a double flight of steps leading up to the second storey on the east side. All round the outer edge of the terrace serving as an ornamental parapet wall, is a continuous row of the usual *vihāra* cell-ornament. The roof of the portico is supported on two lion pillars with bracket capitals. The lions are shown sitting very erect and supporting the pillars on their heads. Their lashing tails are depicted twisted into a curious kind of figure of eight pattern, a very characteristic feature of this type of pillar. There are two unfinished panels on each side of the shrine entrance. Two of these contain small unfinished figures of doorkeepers in relief, one wearing the horned headdress already referred to. The other two panels contain a four-armed image of Siva, and a two-armed female figure perhaps meant for Pārvatī. On the south face of the central hall there are seven rectangular panels containing Saiva figures in relief. On the north side there are seven more panels, five of these contain Saiva figures and two in the centre are Vaishanava in character. There are also a couple of panels on the east side flanking the double flight of steps, which contain ordinary human figures in relief. Like the larger panels decorating the angles of the ground floor, most of these smaller panels are also inscribed. It was at first thought that these inscriptions gave the names of the deities represented, but Dr. Hultzsch has pointed out that they are merely *birudas* of the Pallava king who founded the temple. The cornice is decorated with the usual dormer window ornament and has a frieze of *ganas* below it.

The plan of the second terrace is similar to that of the one below it and is decorated in the same manner. Here on the west side the shrine cell is finished and contains a panel carved on the back wall representing in relief, Siva in the form of Sōmāskanda, and a mortise hole cut in the floor of the cella and a drainage channel for the escape of holy water, shows that it once contained a *linga* as the object of worship. This Sōmāskanda panel is also portrayed on the back wall of both the Saiva shrines in the Shore Temple, and in the three cells belonging to Atiranachaṇḍa's temple at Sāluvankuppam. and occurs in all the Pallava temples of the Rājasimha period This sculpture represents the well-known group of Siva, Pārvatī and the child Skanda or Kārtikeya. Siva is depicted four-armed and sitting on a throne or oblong pedestal, with Pārvatī sitting beside and turned towards him. She

is two-armed and holds the child Skanda on her knee. In the upper corners of the panel are two little flying *ganas* waving fly-whisks. There is a four-armed attendant on each side of the main group, these two figures represent Vishnu on the proper left and Brahmā on the right. As a rule, the walls of the interior of a Hindu shrine cell are free from all ornament, it is only in Pallava temples where these ornamental panels occur. (Plate 16 (*c*).)

The shrine entrance is guarded by two doorkeepers armed with clubs and portrayed in the usual Pallava style but without the horned headdress this time. On each side of the two doorkeepers is another panel, each containing a figure of a male worshipper. The cornice over the porch only, is decorated with a row of *ganas* carrying a garland, and the rest of the cornice is decorated with the usual dormer ornament with a frieze of sacred geese below. The other three faces of the simulated central hall are decorated with tall panels containing bas-relief figures similar in style to those portrayed on the lower terrace. On the east side there are five two-armed standing figures, one depicted with a halo and holding a flower in the right hand. On the south face there are also five panels, all containing two-armed figures except the centre one, which represents a four-armed image of Siva, and five more panels containing similar figures decorate the north face. The top storey and the octagonal bell-shaped dome are similar in all respects to those of Arjuna's Ratha already described. The big vase-shaped finial that once crowned the dome now stands on the ground on the east side of the temple. The upper storeys contain many traces of old plaster work on the walls and although the ground floor is so unfinished, the temple appears to have been used for worship. The means of ascent to the first terrace is not obvious, but it was probably by a wooden ladder as it is to-day. It is a particularly interesting temple, and as an example of marvellous stone-cutting and carving, is quite the most wonderful monument in Southern India. It is also very interesting as the prototype of the lofty structural pyramidal temples of later times.

Although this temple and Arjuna's Ratha obviously belong to the same period, *i.e.*, Māmalla, it is impossible to say which was excavated first, but one would naturally suppose that the sculptors would attempt the smaller temple first before undertaking such a stupendous work as the bigger one. The fact that the smaller temple was completed, or nearly so, and the big one left in a very unfinished state with regard to its ground floor, seems to indicate that Arjuna's Ratha was begun and finished first. The striking similarity of the upper floors and domes of both temples points to the same masons being employed on both works. They are the only two rock-cut temples in this pyramidal style on this side of Māmallapuram, but there are three small unfinished examples in the same style situated close to the canal on the western side of this ancient site. The latter are too unfinished to be of much architectural interest, but I may as well briefly describe them here so as to complete the account of the temples in this particular style.

No. 10. (Valaiyankuttai Ratha).—This is a small rock-cut shrine standing close to the canal and facing the east. In style it resembles Arjuna's Ratha; only it is much inferior in proportion and is not so ornate. It is square on plan with a shallow unfinished portico on the east side. It has two storeys decorated with the usual *vihāra* cell-ornament. The convex cornice is plainer than usual, and in the little dormer windows square-headed beam ends are depicted in relief instead of the little human heads. It is crowned with a rather squat quadrangular dome, slightly splayed at the base and ornamented in the same style as the rest. The ground floor and plinth are unfinished. (Plate 17 (*a*).)

No. 11. (Pidāri Rathas).—About 150 yards further north are two more rock-cut shrines similar in style and on plan to the last. They are both small and unfinished excavations, the domes and upper storeys only showing any signs of completion. The one to the south faces the east and the other the north. These three temples would appear to belong to the same period as the so-called Five Raths, that is, the Māmalla period. (*Circa* 640 to 674 A.D.)

No. 12. (Ganēsa Temple).—This temple is situated about 50 yards north-west of the great bas-relief known as Arjuna's Penance (No. 29). It is the last example of the so-called *rathas* and quite the most finished and ornate of them all. (Plate 17 (*b*).) Engraved on the walls of the portico is a duplicate Sanskrit inscription of the one belonging to Temple No. 1, mentioned above. Like the latter, it records that the temple was dedicated to Siva and founded by a Pallava king called Atyantakāma. As no date is given, it is impossible to know for certain which king is referred to in the inscription as several of them bore this same surname. However, the architectural style of the monument indicates that it belongs to the Māmalla period like the rest of these so-called *rathas*. The fact that the work is finished suggests that it was probably begun before any of the monuments in the group known as the Five Raths. The ugly modern image of Ganēsa now inside the temple was installed there by the villagers some forty years ago with the permission of the District Collector, whose kindness of heart seems to have over-ruled his head.

It is an oblong monolithic temple with two upper storeys and a waggon-roof, having two gable end façades with horseshoe bargeboards like Bhīma's Ratha (No. 8) which it closely resembles, although much smaller being only 20 feet in length from north to south, $11\frac{1}{2}$ feet in width, and 28 feet in height to the top of the gable finial. It faces the west like most of these so-called *rathas*. The ground floor represents an oblong hall with a pillared portico on the west, and a little cella within, measuring 6′ 11″ × 3′ 9″, and 6′ 8″ in height. The *linga* which was originally enshrined in the cella appears to be the one now set up under a tree facing the road and a few yards north of Arjuna's Penance. I discovered this *linga* some years ago lying

in a clump of cactus midway between the temple and the tree. As the villagers objected to the removal of their Ganēsa image to accommodate the *linga,* I had no alternative but to place it under the tree so that visitors might see what these curious symbols of Siva are like. A few other good examples may be seen set up alongside of the road near the Post Office. The earliest type of Pallava *linga* found at Māmallapuram is tall, cylindrical in shape and highly polished. Some were executed in the local granite and others in black basalt brought from a distance. They are about 4 feet in length, the upper portion which protruded above the *yoni* pedestal is highly polished, and the base is left in the rough and square or hexagonal in section. The base was fixed in a socket hole cut in the floor of the cella, and the *yoni* stone, which had a hole cut through its centre, was then slipped over the head of the *linga* and rested on the floor. It helped to keep the *linga* firmly in position and also served as a drainage channel for the holy water poured over the *linga.* For some reason or other the lip or spout of the *yoni* stone always faces the north. The later type of *linga* was generally executed in polished black stone and was shorter and thicker than the earlier examples. At a still later date, especially during the Rājasimha period, they became quite ornamental. The shaft was carved in the form of a polished black stone prism with eight or sixteen slightly fluted vertical facets terminating in the crown of the *linga,* and the *yoni* stone became an ornamental pedestal. Three different types of Pallava *lingas,* an early, an intermediate, and a late (Rājasimha) example, are illustrated in Plate 18. They are interesting, because to some extent, the style of the *linga* found in a Pallava shrine indicates the approximate age of the latter

The pillars and pilasters of the portico have the prevailing lion bases and corbel capitals. At each end of the façade, is a panel containing the usual figure of a doorkeeper facing the front. The outer walls of the ground floor are ornamented with a row of simulated wooden pillars all round, just as we noticed in the ground floor of Sahadeva's Ratha (No. 7). The cornice is decorated with the dormer window ornament and is carried all round the temple and marks the division between the ground floor and first storey. The latter represents an oblong terrace containing a simulated hall in the centre surrounded by an open passage and the usual row of miniature *vihāra*-buildings all round the outer edge of the terrace. The hall has four balcony windows on each side and an entrance at each end as in Bhīma's Ratha. The little dormers and the *vihāra*-like ornament still possess most of their finials, which gives the temple a pleasing and more finished appearance than usual. On plan and in style, the top floor resembles the one below it. The central hall is shown with three balcony windows on each side and is crowned with a very ornamental waggon-roof. As in Bhīma's Ratha, the ends of the cross beams of the roof are portrayed projecting outwards over the windows below and protected with horseshoe gables decorated with trident-headed finials.

The summit of the roof is decorated with nine vase-shaped finials. The gable ends are smaller but similar in style to those adorning Bhīma's Ratha and are decorated in the same manner. They have the pendent wooden-like brackets just below the bargeboards and an elongated *dāgaba*-like object as a central piece. Above the top of the latter, is a little simulated waggon-roof with a horseshoe gable decorated with a trident-headed finial. (Plate 16 (*b*).) In this case, the *dāgaba*-like object in all probability, is really a conventional representation of an ornamental Saiva *linga*. The bargeboards, both in shape and design, resemble those belonging to Bhīma's Ratha. The finials of the latter are missing so we do not know what they were like, but here all the gables were decorated with trident-headed finials like the one illustrated in Plate 16 (*b*).

No. 13. (Varāha Mandapa).—Is a charming little excavation in the so-called "cave-temple" style. It is situated a few yards to the south-west of the Ganēsa Temple and faces the west. It consists of a ground floor only, as is usual in temples in this style. The simulated roof of the shrine is depicted in relief on the face of the rock above the cornice, in the same manner and style as we noticed in the Trimūrti Temple (No. 4).

The temple has an oblong hall or portico 20½ feet in length, 8½ feet wide and 10½ feet in height. The cella as usual is cut in the centre of the back wall and faces the west. Plate 20 (*a*). It projects a few feet into the hall and is provided with a flight of narrow steps leading up to the doorway, a plain rectangular opening between square half pilasters of the prevailing wooden type. The bracket capitals of the pillars at the angles of the shrine chamber are decorated with little rampant lions, and below the dormer window cornice is a frieze of *ganas*, just as in Arjuna's Ratha. The cella is empty, but we may presume that it originally contained an image of Vishnu, or one of his numerous incarnations set up on the rock-cut pedestal within. In front of the temple is an open terrace containing a small oblong rock-cut ablution tank with steps leading down to the water. It is the only temple here possessing this unusual feature. Numerous signs of old plaster and colour work on the walls and ceiling of the shrine show that it was used for worship.

The façade has three bays or openings between two octagonal pillars in the centre with corresponding side pilasters at each end. The pillars and pilasters are typical specimens of the lion-based variety and are beautifully cut and finished. The pillars have the usual corbel brackets above their capitals which give them a very wooden appearance. Plate 19 (*a*). The corbels are decorated on the underside with the roll ornament so common in the temples of the Mahēndra period. Above, overhanging the hall is the usual convex cornice, decorated with three pairs of dormer windows. Instead of the tiny human heads in relief, the simulated window openings are filled with a lotus design. The interior is provided with a similar cornice below the ceiling which is carried all round the hall. Here, the dormer window ornament

contains the little human heads in relief as usual, and a frieze of sacred geese below it. (Plate 20.) The base of the walls is provided with a carved plinth decorated with simple mouldings carried all round the hall. On either side of the shrine doorway and also on the projecting side walls of the cella, are panels containing figures of four doorkeepers. They are life-size figures of the usual type portrayed without weapons and face the front. The ceiling of the hall is decorated with a conventional lotus design in relief which shows signs of having been painted.

The most remarkable feature about the temple is, the four large panels containing Hindu Mythological tableaux in bas-relief, two on the back wall and one on each end wall of the hall. (Plate 21.) They are as follows :—

Varāha Avatāra (Boar incarnation of Vishnu).—This scene is carved on the north wall and illustrated in Plate 21 (*a*). In the centre of the group stands Vishnu, four-armed and with a boar's head. In his upper right hand he holds the discus and in the left the sacred conch shell, both without flames of fire. In his two lower arms he holds the Earth-goddess whom he has just rescued from the depths of the ocean and supports her on his right knee. Below his raised foot is a hooded nāga or serpent figure to indicate the presence of water below. On the god's proper left is a four-armed figure of Brahmā with three heads and holding a water bottle. He is accompanied by a bearded attendant. Above, carved in the corner of the panel is a little figure of a male worshipper with clasped hands. On Vishnu's proper right are two standing figures of a male and female worshipper with clasped hands and portrayed facing the deity. Above, in the top corner of the panel is a figure of Sūrya depicted with a halo and clasped hands. Extending from Sūrya to the worshippers below, is a crude representation of an elongated cornucopia symbolising the fruitful effect of the sun's rays on the earth. Another, and very much better representation of a cornucopia appears in the great bas-relief known as Arjuna's Penance. (Plate 31 (*a*).)

Vāmana Avatāra (Dwarf incarnation of Vishnu).—This tableau is carved on the south wall and faces the Varāha scene. (Plate 21 (*b*).) Vishnu is portrayed with eight arms and standing in his typical posture for this *avatāra*, with his left leg stretched heavenwards making the three famous steps (*Trivikrama*) through the Universe. The popular story concerning this *avatāra* is as follows :—The great demon king Bāli having conquered the three worlds ruled them, strange to relate for a demon, with charity and justice. Indra, the chief of the gods, was thus superseded, so he appealed to Vishnu, the avowed destroyer of the demons and upholder of the gods, to restore him to his rightful position. As Vishnu could not make war on so virtuous a king, he adopted strategy, and presented himself before Bāli in the guise of a dwarf Brāhmana, a student of the Vedas, and begged the king to grant him three feet of his territory on which he could sit and meditate undisturbed. The generous Bāli suspecting nothing granted the request, but was soon

astounded to see the little dwarf assume the form of an eight-armed giant, who in a single step covered the whole earth and in the next the sky, and then demanded Bāli to show him where he might place the third. True to his promise, Bāli offered his own head, on which the god placed his foot and sent him down to the lower regions. In his eight hands, Vishnu holds the discus, conch, dagger, sword, shield, and bow, while his upper right hand rests against the roof of the world so as to keep his balance on one leg, and his upper left hand points at a figure of Brahmā seated on a lotus throne up in the heavens. Brahmā has four arms and three faces, and is shown reverently touching Vishnu's uplifted toe with one hand, and the god's extended finger with the other. Facing Brahmā, and depicted flying through the sky, the clouds of which resemble sprouts, is a very curious little human figure with a dog's, or a bear's head. His left hand is pointed at Brahmā, and in his right, he holds an object that appears to be either a drum or a square-shaped buckler. Presumably, this curious little figure represents some star or planet, as it is unlike any of the usual celestial figures of flying *ganas*, *gandharvas*, *apsaras*, etc. On the opposite side of the panel, is another figure of a four-armed deity seated on a lotus throne. It is a companion figure to the one of Brahmā, and probably represents Siva. Just below, and depicted in mid-air are two flying figures with large haloes. They represent Sūrya on Vishnu's right and Chandra (Moon) on his left. Close to Chandra is a representation of a human figure depicted falling from the sky. Perhaps this is meant to represent Bāli's descent to the lower regions. The four seated figures in the foreground grouped around Vishnu's foot are apparently intended for Bāli and his retinue who are struck with amazement at the sudden transformation of the little dwarf into the all-pervading Trivikrama.

Lakshmī (Vishnu's Consort).—This panel is not so finished as the other three. It is placed on the proper right of the shrine chamber and next to the Varāha panel. The goddess is two-armed and portrayed in the nude, seated on a full-blown lotus throne arising from the ocean. The throne and conventional lotus leaves, the latter indicating the ocean, are unfinished. Lakshmī holds in each of her clenched hands a lotus bud. She wears a conical headdress a little different to the usual kind, big round ear-rings and a few jewels. Four naked female attendants wait upon her, two hold lotus buds and the others water pots, which two elephants in the back-ground take in their trunks and pour over the goddess' head as an act of worship. The nude figures of the women closely resemble the *gopīs* portrayed in the Krishna Mandapa (Plate 28), indicating that both works belong to the same period.

Durgā.—In this panel, we have a bas-relief representation of this popular goddess, similar in style to the image enshrined in the so-called Draupadi's Ratha (No. 5). She is portrayed with four arms and standing very erect on an unfinished lotus pedestal under the shade of a royal umbrella. In her upper hands she holds the conch and discus as is usual here, and wears

the tall headdress, jewels, and the breast ornament already referred to. Two goblins or *ganas*, one armed with a *kūkri*, are depicted on either side of her in mid-air. Above in the upper corners of the panel is a deer's head on the proper left and a lion's on the right, the latter being Durgā's vehicle. Below, crouched at her feet are two male worshippers. The one on the proper right is portrayed cutting off his hair with his sword as a votive offering to the goddess. The other figure raises the right hand in the act of adoration. These two figures are almost identical with the two worshippers depicted at Durgā's feet in the so-called Draupadi's Ratha (No. 5), indicating that both temples belong to the same period.

No. 14. (Varāha Temple).—Is a private temple which was taken over by the Vaishnavas in mediæval times and which they have retained ever since. The original rock-cut temple is hidden from view by the unsightly modern building erected in front of it. (Plates 19 and 22.) The only portion of the original work that can now be seen from outside, is the simulated roof line carved on the face of the rock just above the flat roof of the modern building. Both on plan and in style, the original temple closely resembles the Varāha Mandapa described above. It consists of a large pillared hall facing the west with a shrine cell cut in the centre of the back wall. The hall is about 33 feet long, 14 feet wide, and 11½ feet in height. It has two rows of pillars. The front row contains four lion pillars of the usual kind with corresponding side pilasters at each end. They resemble the pillars in the Ganēsa Temple. (Plate 23.) The back row contains only two pillars and they are different in shape to those in the front row. (Plate 23.) The cornice and plinth mouldings around the hall are similar to those in the Varāha Mandapa, and like the latter, the back and end walls are decorated with large panels filled with bas-relief figures and sculptural scenes. The shrine chamber projects a few feet into the hall and is provided with a small flight of steps. Two doorkeepers, one on each side, are carved on the projecting side walls of the shrine. Inside the cella, carved on the back wall is a large bas-relief, 8 feet high, of the Boar Incarnation. It is a copy of the one in the Varāha Mandapa but without the attendant figures. On the right and left of the shrine chamber, carved on the back wall, are tall narrow panels containing figures of Vishnu's two consorts Lakshmī (Wealth) and Prithvī (Earth). They are more or less duplicate figures representing a four-armed goddess standing on a round lotus pedestal with two worshippers kneeling at her feet. On the proper right is a large panel representing Lakshmī and the elephants, a copy of the one in the Varāha Mandapa. On the left is an eight-armed figure of Durgā standing on a buffalo's head, with two female attendants, one holding a sword and the other a bow, and two male worshippers crouched at her feet. Above are two flying *ganas* and the heads of a lion and a buffalo, one in each upper corner of the panel. On the south wall is a standing bas-relief of Brahmā with four arms and three faces. Facing this, carved on the north

wall is a two-armed male figure seated on a lion throne (*simhāsana*) attended by two women, one on each side. This image does not appear to represent a god, but looks rather as though it was intended as a portrait of some rāja and his two wives.[1]

No. 15. (Mahishāsura Mandapa).—Here, we have a large unfinished excavation situated on high ground within a few yards of the Lighthouse and facing the east. It is a triple-celled Saiva temple consisting of a hall or verandah 32 feet long from north to south, 15 feet wide and 12½ feet high. (Plate 24.) The façade has five lofty bays between four pillars with corresponding side pilasters at each end. The shafts of the pillars are sixteen-sided with plain unfinished bases, cushion capitals with a square abacus, cubical block above, and deep unfinished corbel brackets supporting the architrave. The pillars are similar in style to those appearing in the back row of Temple No. 3. (Plate 7 (*b*).) One pillar has been cut out and removed, and the next one has also been sadly mutilated with the same object in view. The missing pillar was carried off to the Varāha Temple, presumably, to be used in the construction of the hideous modern *mandapa* and other additions erected in front of the old rock-cut shrine. (Plate 19.) The missing pillar has since been replaced by a modern cut-stone shaft, a rather unsightly repair. The simulated roof line and dormer window cornice of the façade have been merely blocked out ready for carving. The outlines of the five pairs of dormer windows along the cornice are roughly indicated. The floor of the hall is raised about 4 feet above the ground level but is unprovided with steps as the basement was never completed. The end pilasters are ornamented in relief with the flaming symbols of Vishnu, presumably, the work of the Vaishnava vandals who removed the pillar from the façade.

The central shrine chamber is larger and more finished than the two side ones, and is provided with a handsome pillared portico in front, the pillars rising from the angles ~~of~~ a stylobate. The pillars have lion bases and the usual type of capital supporting a double bracket of wooden-like appearance.

The sitting lions ornamenting the bases are true lions, and not the usual horned variety prevailing here. (Plate 26 (*b*).) A socket hole, cut in the centre of the floor of the cella, points to the fact that it had, or was designed for a Siva linga. Carved in bas-relief in a large square panel on the back wall of the shrine chamber is a representation of Siva in the form of Sukhāsana, which is closely allied to the Somāskanda form (Plate 16), already described above. It will be noticed that the only real difference between these two scenes is that in the Sukhāsana panel, the bull Nandi, the vehicle of Siva, is introduced, while in the Somāskanda bas-relief this figure is absent. The other two shrine cells are empty, and like the floor of the hall, unfinished. All three shrines are provided with unfinished steps, and panels on each side of the doorways containing the usual figures of doorkeepers facing the front. One

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[1] Since the above was written, the temple has been examined by the Government Epigraphist (*vide* A. S. Memoir No. 26). The temple contains two portrait images, one of Mahēndravarman I, and the other of his son Narasimhavarman (Māmalla), both attended by two queens.

of the doorkeepers on the proper right of the entrance into the cella at the south end of the temple is portrayed wearing the horned headdress referred to above. The front of this cella is also provided with the usual convex cornice and a frieze of geese below it (Plate 26 (*a*)). A cornice of the same pattern is carried round the walls of the hall and a few simple mouldings decorate the base. The most interesting feature of the whole excavation is the wonderful sculptured tableaux of Vishnu and Durgā at each end of the hall.

These two remarkable bas-reliefs have been well described by Dr. J. Ph. Vogel in his "*Iconographical Notes on the Seven Pagodas*" (A. S. R. for 1910-11). His description is as follows:—"The temple has received its popular designation from one of the two large reliefs carved on the side walls. This relief which is found on the right-hand wall on entering, represents Durgā defeating Mahishāsura (Plate 25 (*b*)). The eight-armed goddess, astride on her vehicle, the lion, is shown in the act of shooting arrows at the demon king. The emblems held in her remaining six arms are a disk (*chakra*), a bell (*ghaṇṭā*) and a sword (*khaḍga*) to the right, and a conch (*saṅkha*), a noose (*pāsa*) and an indistinct object to the left. A quiver is visible over her left shoulder. She is surrounded by a host of dwarfs, evidently the Ganas of Siva, her spouse. One, behind her, holds a parasol over her head; another, at her side, waves a flywhisk (*chāmara*). The remainder carry various weapons—usually a round buckler and a curved sword in shape somewhat like the *kukri* of the Gurkhas. One in the foreground is in the act of shooting an arrow from a bow. Distinct from these Ganas is a female figure fallen on her knees in front of the lion and raising a sword with her right hand. Possibly this figure represents Kālī, an emanation of Durgā, though she does not present the terrific appearance peculiar to the 'black' goddess.

"Right opposite Durgā stands the colossal figure of the buffalo-headed demon king. His royal rank also is indicated by a parasol over his head. He carries a heavy mace in his two hands and has, moreover, a sword fastened to his left hip. His attitude is that of yielding to the onslaught of the warlike goddess. His army is represented by seven demons. Two of these are prostrated in the foreground—one slain and the other apparently wounded. The latter holds up his right hand with two fingers raised. Can this be the gesture of a vanquished warrior imploring his victorious enemy to spare his life? Of the remaining *Asuras* one is retreating, whereas the others seem to offer a feeble resistance. It is worthy of notice that, with the exception of Māhishāsura himself, the demons are shown in a purely human shape.

"The slaying of the Buffalo Demon by Durgā is a very favourite subject not only in India proper but also in Java. In later sculpture the goddess is invariably shown standing with one foot—less frequently with two—on the prostrate buffalo whom she pierces with her trident. It will be seen that the present scene of Māhishāsura's defeat differs wholly from the conventional manner of representing this scene.

"On the opposite wall we find another familiar scene, namely, the sleep of Vishnu (Plate 25 (*a*)). The god is lying on his back on the coils of the serpent Sēsha, whose five-fold hood forms a canopy over his head. He wears his usual high tiara, but is two-armed and is not distinguished by any emblems. In front of his serpent-couch are three small-sized figures, of which two are male and one female. The first male figure, the lower part of which is hidden, raises his left hand and holds some indistinct object in his right hand. The two remaining figures are shown kneeling, the female one in the attitude of adoration (*namaskāra*).

"At the lower end of Vishnu's couch are two colossal figures standing in an attitude of defiance, the one in front holding a mace. They may be identified with Madhu and Kaiṭabha, the two demons, who sprang up from Vishnu's ear secretion during his sleep. Over the sleeping god we notice two flying figures, of which the second has the appearance of a goblin or *gaṇa*. The other, perhaps, represents the goddess Yoganidrā-Durgā born from the wrath of the gods for the destruction of the evil spirits.

"If this identification is correct, it would follow that the present sculpture also relates to the legend of the goddess Durgā like that on the opposite wall. The treatment of the scene of Vishnu's sleep is in any case very different from the stereotyped form found in later Indian Art. As to the date of the remarkable sculptures in the 'Māhishāsura Cave,' I have little doubt that they must be approximately contemporaneous with the five so-called Raths. We have already noticed the great similarity between the group of Siva and Pārvatī in the central shrine of this temple and that found in the Rath of Dharmarāja.

"I may also draw attention to the pillars supported on sitting lions with looped tails, to the dormer windows with human heads along the cornice, and to the goblins or *gaṇas*, all of which are likewise found in the Raths.

"The two large reliefs display an originality of conception and a freedom of execution not often found in Indian Art. The figures are full of vigour and their action is well rendered. Especially is this the case with the lion-riding Durgā, whose onslaught contrasts with the hesitating attitude of her enemy, the Buffalo-Demon. In the same way the lassitude of the slumbering Vishnu is brought out more prominently by the threatening attitude of the two demons."

The visitor to Māmallapuram will be struck by the artistic merit, originality of treatment and power of execution displayed in most of the sculptures, particularly with regard to these tableaux of Vishnu and Durgā, the Boar and Dwarf *avatāras*, and the so-called Arjuna's Penance. Many of the smaller groups and single figures also exhibit a much greater freedom of style than is usual in Hindu art, and even where the central figure is portrayed in a conventional manner, the attendant figures are usually animated and graceful contrasting strongly with the sculptural productions of later times.

On the summit of the great rock in which this temple is excavated, is a ruined Saiva temple constructed in the same style as the Shore Temple.

It was converted into a Lighthouse many years ago and served as such until the new one was built in 1900. These two structural temples, and also the Mukunda Nāyanār Temple, situated about a mile due north of the village, all belong to the Rājasimha period (*circa* 674 to 800 A.D.), and will be described along with the Conjeeveram Temples in Part III of this work, which will deal with the later examples of Pallava Architecture.

No. 16. (Râmānuja's Mandapa).—This excavation is situated on high ground at the back of the Lighthouse Keeper's quarters and faces the east. It was originally a triple-celled shrine dedicated to Siva and contains on the floor of its lofty hall a few lines of a Sanskrit inscription, which according to Dr. Hultzsch is a duplicate of the last part of the inscription in the so-called Ganēsa Temple (No. 12). The temple has been more completely wrecked by the Vaishnavas than any other here, a fact which seems to indicate that it was probably once the most finished and important Saiva temple of all. On plan and in style it must have closely resembled the Mahishāsura Mandapa. It originally had three shrine cells excavated in the back wall, the centre one of which projected forward beyond the two side cells. But this central cell has been completely destroyed so as to throw all three cells into one big chamber. The remains of a bas-relief panel on the back wall of the central cell can be seen. It must have originally contained a bas-relief representation of the Somāskanda, or the Sukhāsana scene. The figures in relief have been cut away flush with the level of the panel but the outlines of Siva's tall head-dress and the umbrella over Pārvatī's head can still be traced. The interior consists of an oblong hall 24 feet long and originally about 8 feet deep. It is provided with a convex cornice of the usual kind below the ceiling and a frieze of geese along the front. At each end, are tall panels that once contained large figures of doorkeepers facing the front, armed with clubs and decorated with serpent girdles. Both ends of the hall originally had large panels filled with bas-relief sculpture, which like the figures of the doorkeepers have been carefully obliterated so that nothing of interest remains.

The façade has three spacious openings between two handsome well-carved lion pillars with corresponding side pilasters at each end (Plate 27). The projecting cornice has the usual dormer window ornament, but the simulated windows are decorated with a conventional lotus design, as in the cornice adorning the façade of the Varāha Mandapa. Curved wooden-like brackets support the underside of the cornice and below there is a frieze of goblins or *ganas* carrying a garland, just as we noticed in Dharmarāja's Ratha, only in this case, the little *gana* over the main entrance is depicted with an elephant's head like Ganēsa. and is apparently intended to represent that son of Siva. Above the handsome cornice, carved in relief, is the usual representation of the exterior of the roof over the hall. The simulated railing enclosing the *vihāra*-like buildings is very Buddhist in style. At each end of the façade is an ornamental niche designed to represent a miniature temple, similar in

style to the model of a shrine portrayed in Arjuna's Penance. Similar rock cut Saiva memorials occur in connection with the Undavalli Temple in the Guntur District (*Vide Part I, Plate 13*).

In front of the temple is an open terrace. Carved in relief at each end are the flaming symbols of Vishnu, the work of the vandals who destroyed the temple and erected the unfinished colonnade which now disfigures the terrace. Had this building been completed, it would probably have been similar in style to the closed masonry-built hall erected in front of the Varāha Temple (Plate 19). The steps cut in the face of the sloping rock at each end of the terrace, represent stepped-footings or foundations for the masonry side walls of the hall, and also to assist the masons in building this addition in front of the original shrine. This method of constructing a wall on sloping sheet rock is well illustrated in the side walls of the Krishna Mandapa (Plate 28 (*c*)). Brick enclosure walls were constructed in the same manner. The stepped-footings for such walls may be seen cut in the face of the sloping rock on the north side of the temple, with remains of the old bricks and mortar still embedded in their rock foundations.

On the summit of the rock is an unfinished stone built structure facing the south. The massive stone beams and pillars used in its construction are similar in style to some of those belonging to the unfinished colonnade below, indicating that both works belong to the same period. It is of no architectural value, but it illustrates the method employed in constructing such buildings on sheet rock in difficult situations. The size of some of the beams and pillars is remarkable and it must have been a difficult job to get them into position. It seems to have been constructed as quarters for the Vaishnava priests who took over the old Saiva temple in mediæval times.

No. 17. (Pancha Pāndava Mandapa).—An unfinished excavation adjoining Arjuna's Penance on the south side and facing the east, it is the largest of the so-called "cave-temples" and one of the most unfinished within. So much so, that it is impossible to know what the plan of the interior would have been like had it been finished. The façade is the only portion of the work which has been at all completed. It is provided with seven bays between six lion pillars with corresponding side pilasters at each end. The bases, shafts and capitals of these pillars are in the usual style and call for no remarks, but the brackets above the capitals are different to any other here, and form the distinctive characteristic of this excavation. They represent three semi-rampant lions or griffins with human riders, grouped back to back, one directly to the front, and two obliquely or diagonally reminding us of the Persepolitan capitals of some of the old Buddhist pillars. In two or three only have these brackets been finished, in the rest they have only been blocked out, and where finished the steeds and their riders are much weather-worn and decayed (Plate I (*d*)).

Above the architrave a bold projecting cornice free from ornament extends the whole length of the façade, about 50 feet. Above the cornice the rock

has been cut back, leaving a row of the usual *vihāra*-like buildings behind a railing ornament adorned with the usual griffin's heads, the whole design as usual representing the simulated roof line of the temple.

No. 18. (Krishna Mandapa).—This structure is about 40 yards south of Temple No. 17 and faces the east. It consists of a comparatively modern pillared hall or *mandapa* erected so as to enclose the great bas-relief carved on the face of the rock. The hall was no doubt built by the Vaishnavas, and as the sculptures contain no Saiva figures or symbols, they have been permitted to remain intact, but they have received numerous coats of white-wash in the past which has not improved their appearance and makes photography difficult. The great pastoral scene carved on the rock is about 29 feet long and 12 feet high and originally had an open terrace in front with sloping return walls at each end. The latter were stepped in the usual manner to accommodate the modern enclosure walls of the hall which now occupies the terrace (Plate 28 (*c*)).

The bas-relief represents *Brindāvana* (Brindāban), the scene of Krishna's youthful exploits among the cowherds with whom he lived at that place. The principal figure in this great bas-relief represents Krishna holding up the hill called Govardhana in his left hand in order to shelter a group of cowherds, men, women and children, and their cattle, from a deluge of rain sent down by Indra in anger to destroy their village. Around the god are groups of cattle in the background, and cowherds with their women folk in the fore-ground. The women (*gopīs*) wear tall headdresses and a few jewels, but other-wise are naked, and depicted engaged in their wonted vocation. Some carry vessels filled with dairy produce; others bundles of grass and a few are shown leading their children by the hand. There is also a clever representation of a cowherd milking a cow (Plate 28 (*b*)). These peasant figures are clad in loin cloths and wear turbans. In style, some of the nude *gopīs* are very simi-lar to the female figures portrayed attending on Lakshmī in the Varāha Man-dapa (Plate 21 (*c*)), indicating that both works belong to the same period. On Krishna's proper right, is another big figure of a prince or two-armed deity, depicted with his left arm round the neck and shoulders of a cowherd. Whether this figure is also intended to represent Krishna is not clear. The peasant figures are life-size, but these two central figures are double that size. The Govardhanadhara Krishna wears a tall headdress and the usual ornaments, including the big round ear-ornaments peculiar to Pallava art and common to both male and female figures. Carved on the upper portion of the sloping return wall at the north end of the hall is a finely executed figure of a bull. On the opposite wall is a group of lions, a leo-gryph or griffin, and a monster with a lion's body and human head. The latter is a very unusual figure and resembles in style some of the Assyrian-like monsters depicted in the famous Sānchī bas-reliefs. It is worthy of note that the Pallava sculptors had a very good notion of the appearance of a lion even if they had never seen one. The

figure of a lioness in her den, depicted at the top of the group, is a good example of this. Unlike the sculptors of later times, the Pallavas never confused the lion with the mythical leo-gryph or griffin. Durgā's lion for instance is always portrayed as a true lion, and never with horns or griffin's feet as in later Hindu art. The conventional lions ornamenting the bases of the pillars here, and which form such a characteristic feature of the architecture of this period, are usually shown with three horns, but examples of true lion pillars are not wanting, one of the best examples is illustrated in Plate 26 (*b*).

No. 19. (Arjuna's Penance).—This great "rock-sculpture" is unique and unlike any other ancient monument in India. It is situated at the back of the l arge modern Vaishnava temple in the village and faces the east (Plate 29). In his "*Iconographical Notes on the Seven Pagodas,*" referred to above, Dr. Vogel states with reference to this monument as follows:—"There is some reason to assume that this designation has as little connection with the original meaning of this gigantic sculpture as the popular names of the so-called Raths. It is true that among the numerous figures rather a prominent place is taken by an ascetic standing on one leg and stretching his two arms upwards (*ūrdhva-bāhu*) in the position so often described in old Indian Epics. But there is nothing to indicate that this figure represents Arjuna. At his right side we notice a four-armed god, whose attributes are by no means clear, but from the presence of goblins, probably meant for *ganas*, we may perhaps infer that it is Siva. It should, however, be noted that in Pallava art we find similar figures attending other deities also. Feats of asceticism rewarded by some boon granted by one of the gods are so frequent in epic literature that there is very slight justification indeed for identifying this sculpture with the particular scene of Arjuna's *tapas*.

"On the contrary, all that is typical in that episode is absent here. The story is that Siva appeared to Arjuna in the shape of a wild Kirāta hunter pursuing a boar which became the object of an altercation and personal combat between the two. It is an undoubted fact which has drawn the attention of previous explorers that the supposed group of Arjuna and Siva does not really form the centre of the whole sculptural picture. From both sides the numerous figures of demi-gods, men and beasts—mostly in couples and most of them folding hands in the attitude of adoration—are turned towards the large vertical cleft or fissure which separates the two halves of the rock. The so-called Arjuna and Siva are placed a little to the proper right of this cleft, and it will be noticed that some of the adoring figures are turned away from them and, like the others, are flying towards the cleft. This cleft, therefore, is the real centre of the whole sculpture."

When Dr. Vogel wrote the above remarks in 1910, he had not seen the photograph illustrated in Plate 29 (*a*) which was taken many years ago before the monument was repaired by Government. If the visitor will take the trouble of climbing to the top of the rock, which is an easy matter if ap-

proached from the west side, he will find a number of rock-cut channels or footings immediately above the cleft, showing that a brick or masonry cistern was once built on this spot (Plate 32). This cistern was about 23 feet square with a concrete bottom and plastered walls. It was apparently filled by hand labour, because there are the remains of a flight of rock-cut steps leading up from the ground below on the north side. Here, the ascent up the perpendicular portion of the rock must have been by means of a wooden ladder. It would appear that on certain festival occasions, this cistern was filled and the water allowed to flow down the cleft in the form of a cascade into the tank below, simulating the descent of a mountain torrent.

It is recorded in the "*Manual of the Chingleput District*," dated 1879, that while Lord Napier was Governor of Madras, he visited the Seven Pagodas and had the ground in front of this cleft excavated to a depth of 7 or 8 feet, which exposed the now familiar figures of the deer, the cat and the mice, and the baby elephants, which until then had remained hidden from view owing to the ground in front having become silted up with a thick deposit of broken bricks, stone and concrete debris. The broken tusk of the larger elephant, the upper portion of the male Nāga figure, and a big square-shaped stone measuring 4′-9″×3′-4″ and 1′-4″ thick, with a rectangular piece cut out of the back and a nicely dressed cornice moulding in front, were found buried in the debris immediately in front of the cleft. This stone is now lying at the bottom of the tank, and there is no doubt that it fell from the top of the cleft where it was originally fixed to protect the sculptures below from the downpour of water from the cistern. It would appear that the cistern and other masonry work above decayed and collapsed and that the debris was washed down the cleft during the rains smashing the Nāga figure and elephant's tusk in transit and silting up the tank below. It will be noticed in the photograph illustrated in Plate 29 (*a*) that the elephant's tusk and upper portion of the Nāga figure are missing, these were subsequently refixed by the Public Works Department, who also constructed a dwarf masonry parapet wall across the mouth of the cleft and directed the surface water above down another cleft running north behind the face of the rock. These repairs were found necessary in order to save the sculptures in the cleft from future injury from falling debris washed down by the rains, and also to prevent the tank below from again silting up. The tank was cleaned out, levelled and the side walls revetted with stone so as to give it a neat and tidy appearance.

The cleft running down the centre of the rock is natural and in order to provide it with a more or less smooth surface so that the water might flow freely down the front, the Pallavas closed up the deep recess at the back with brick and rubble masonry in mortar, and then inserted the two free-standing figures of the male and female Nāgas. These two images are carved in the round and were fixed after the main work was finished and are not hewn out of the natural rock like the rest of the bas-reliefs adorning this

wonderful scene. Altogether, there are seven Nāga figures at the foot of the cleft, both male and female, and most of them are portrayed with folded hands in the attitude of adoration and rising up out of the water below. The Nāgas are sacred water-spirits residing in lakes and rivers, and their presence here is mainly to denote the sanctity of the stream that once flowed down the cleft into the tank below. When the Pallava sculptor wanted to suggest the presence of water in a sculptural scene, he usually did so by introducing a Nāga figure rising up out of a bed of conventional lotus leaves depicted in the foreground of his subject. A good example of this occurs in the Boar Incarnation tableau in Temple No. 13 (Plate 21 (*a*)).

Fergusson assumed that the free standing figures of the Nāga and Nāgī fixed in the centre of the cleft, were the real objects of adoration and that, therefore, the whole scene relates to Serpent worship. But it has been rightly pointed out that this interpretation is impossible as the Nāga figures themselves assume the same attitude of *namaskāra* as the other demi-gods—*Gandharvas* and *Apsaras*, *Kinnaras* and *Kinnarīs* portrayed in this scene (Plate 30 (*b*)).

Dr. Vogel remarks, "Can it be that once there existed here a sacred spring and that the water gushing forth from the cleft was the real aim and object of all the adoring figures? The presence of the Nāgas would then be most easily accounted for, as they are the water-spirits dwelling in lakes and springs." He also draws attention to the splendid group of ascetics, some carved in the round, which are engaged in the various occupations of the hermitage in front of a little shrine, and says, "Such a scene is usually laid on the banks of some sacred river, and we find indeed among these figures, nearest the cleft, a young ascetic carrying a water-jar on his shoulder. He reminds us of the famous episode of the Rāmāyana in which Dasaratha shoots by mistake the son of a blind hermit, while he was filling his water-jar in the dark."

The figure of the ascetic carrying the pitcher on his shoulder and his companion holding a cornucopia are particularly interesting (Plate 31 (*a*)). Both figures have a semi-classical style about them which corroborates Dr. Hultzsch's suggestion that some of the sculptors who executed these works came from Northern India. The presence of the Horn of Plenty next to the cleft is obviously meant to denote the productive powers of the simulated river that once flowed down this cleft.

On the opposite side of the cleft, facing the two ascetics just described, we have that quaint figure of the sanctimonious cat standing, like Arjuna, on one leg with his fore-paws stretched out above his head. Concerning this curious figure, Dr. Vogel remarks, "We are at once reminded of the hypocritical cat Dadhikarna of the Indian fable who assumed the part of a pious ascetic to allure the unsuspecting hare and sparrow into his power. I have little doubt that the sculptor who fashioned this figure had Dadhikarna in mind, though there is here no evidence of the penitent cat not being sincere.

The mice playing around him do not seem to disturb his quietude of mind. But the interesting point in the present instance is that the cat of the fable performs his feigned penitence on an island in the sacred Gangā (Ganges) according to one version and according to the other, on the bank of a river."

On each side of the top of the cleft, is a figure with a big halo at the back. Similar figures appear in the Dwarf Incarnation tableau in Temple No. 13 (Plate 21 (*b*)). They evidently represent Sūrya and Chandra. On the proper left of the cleft is a model of a miniature pyramidal temple containing what appears to be a little standing image of Vishnu. In style, this shrine is similar to the smaller examples of the so-called *rathas*, and like the latter, the wooden origin of its roof is obvious. The shrine is portrayed situated on the banks of a river and surrounded by jungle inhabited by wild animals (Plate 30 (*b*)). Grouped around the shrine, a party of nine ascetics is shown engaged in various religious occupations. Four standing figures including the one depicted holding a cornucopia mentioned above, are represented at the water's edge. Four more are shown sitting in meditation in front of the shrine, three of these being unfortunately broken, and the ninth figure is represented standing alone on one leg and with raised arms, above the temple. It is this figure which has been so persistently mistaken for Arjuna, apparently, because alongside of it on the proper right, is a large four-armed image of Siva. It will be noticed that the figures of the ascetics and wild animals are nearly life-size, whereas, the image of Vishnu within the shrine is very small, clearly indicating that the latter plays a subordinate part here and that the temple was introduced merely to denote that the scene represents some sacred place of pilgrimage on the banks of the simulated river.

The big four-armed figure of Siva. carrying his trident and attended by three fat little *ganas* or goblins, appears to represent that deity in the form of Bhikshātana arriving at Brahma-kapālam in the Himalayas (Plate 30 (*a*)). The popular story of this form of Siva is as follows:—When Siva cut off one of the heads of Brahmā, he incurred the sin of killing a Brāhmana; and the skull of Brahmā is stated to have stuck to the palm of his left hand and refused to be removed. In order to get rid of both the sin and the skull, it was ordained that Siva should wander about on earth as a naked beggar (*bhikshātana*), until at length he reached a sacred spot in the Himalayas known as Brahma-kapālam, where he was released from the sin and the incriminating skull fell off of its own accord. As a rule, figures of Bhikshātana are represented in the nude, only a few jewels and the usual headdress being worn. He is always four-armed and usually carries the trident and drum and is accompanied by two or three little goblins and a pet antelope. The nude figure of Siva represented here answers to the above description in every detail, even to the antelope prancing along in front of him. He is portrayed exposing the palm of his lower left hand in a very prominent manner, perhaps to show that it no longer contains the incriminating skull and thus indicating that

he has arrived at Brahma-kapālam in the Himalayas as represented by the group of ascetics around the little temple below. The attendant goblins are quaint little figures. The one following behind seems to be holding a conch-shell trumpet whilst the other two carry fly-whisks. The one on Siva's proper left is depicted wearing a conventional lion's mask across his fat little body. Above Siva's head, is the figure of Chandra and flying along towards the cleft are celestial figures of Gandharvas, Apsaras and Kinnaras.

There can be little doubt that the whole scene is a symbolical representation of the Ganges flowing from the Himalayas. The rock is Mount Kailāsa, and the cascade that once flowed down the cleft represented the sacred Gangā. The figure of Siva seems to have been introduced mainly with the object of making it quite clear that the rock represents the Himalayas.

The Pallavas, or at least the sculptors they employed, appear to have had a particular veneration for the Ganges, perhaps owing to the northern origin of some of them, as we find the same subject, although treated in a different manner, occupying an important position in the rock-cut temple at Trichinopoly excavated by Māmalla's father, already described and illustrated in *Part I*. In this case, the subject is a large bas-relief image of Siva in the form of Gangādhara, "the bearer of Gangā," and he is portrayed in a stooping attitude with the right knee bent and body braced ready to receive the mighty rush of waters on his head and shoulders. Unlike figures of Bhikshātana, images of Gangādhara are portrayed fully clothed and decorated, and the attendant goblins and pet antelope are usually absent, whilst the goddess Gangā is depicted as a tiny stream trickling forth from Siva's matted locks.

No. 20.—About a quarter of a mile to the south of this colossal sculpture, standing in front of the Lighthouse and facing the main road, is another enormous rock with a wide-cleft splitting it into two portions (Plate 33 (*a*)). Carved in rough relief on the east surface of these two rocks is an inferior duplicate representation of the so-called Arjuna's Penance just described. Why the Pallavas thought it necessary to carve two similar representations of the same scene on so gigantic a scale is not apparent. Here again, the cleft is the centre of attraction and towards it the numerous figures of worshippers and animals are turned. An unfinished figure of Siva, and the ascetic standing on one leg with raised arms, have been begun on the upper portion of the south end of the rock, but the remaining figures of ascetics and the temple have not been commenced. The rock at this point is badly fractured as though it had been struck by lightning, perhaps a reason why the work was abandoned. In any case, had it been finished, this great fissure, and the whole of the vertical cleft would have had to have been built up in masonry and plastered over to hide these defects. Whether this was ever actually done will never be known, but it is a curious fact that several of the bas-reliefs on each side of the cleft show signs of having been plastered over and the details of the figures picked out in that material, in the same manner as may

be noticed on the north side of the Shore Temple. It may have been merely a kind of experimental model for the great finished work at the other end of the hill.

No. 21.—Not far from the latter, is the unfinished group of elephants illustrated in Plate 33(*b*). This bas-relief is carved on a small rock and therefore cannot represent a portion of some contemplated larger work that was never completed, as there is no space here available for the purpose. In style and execution the figure of this elephant is similar to the bigger one portrayed in the great finished bas-relief, even to the baby elephants depicted below. I feel quite sure that this unfinished sculpture represents an experimental model for the group of elephants intended for the great bas-relief and which were subsequently improved upon in the finished work. The scene has no religious significance, it merely represents a bull and cow elephant with their two calves in the jungle, the latter indicated by the monkey and the peacock. It is unlikely that the sculptors would waste their time executing a work of this kind in an obscure part of the place, merely for the fun of the thing.

No. 22. (Carved Rocks).—At a short distance to the south of the Shore Temple is a group of weather-worn rocks facing the sea, three of which have been carved into memorials to Durgā. One facing the west is a small copy of the so-called Tiger Cave at Sālavankuppam. It contains a little shrine niche surrounded by a ring of large griffin's heads. The west face of another rock has been crudely fashioned to represent a rampant lion containing a shrine niche with a decayed bas-relief of Durgā within, cut in the centre of its body. A similar memorial to this one, only carefully carved and finished, will be found within a few feet of the Shore Temple on the south side. A rock in front of this Durgā shrine has been carved into the shape of a recumbent lion. On the east face of the Durgā rock is a niche with an elephant's head below it indicating an Indra shrine, and the bas-relief of a trotting horse is carved on the opposite end of the rock. The horse perhaps represents the vehicle of Kubēra the god of wealth. A few attendant figures, probably worshippers, are also portrayed on the Durgā rock but they are now too decayed to be of any interest. The Indra shrine and the figure of the horse also occur in the so-called Tiger Cave at Sālavankuppam.

No. 23. (Mahishāsura Rock).—On the north side of the Shore Temple is a big rock standing in the sea. It contains a small rock-cut Durgā shrine facing the east. This is a larger and more important work than those on the south side of the Shore Temple. Carved on the back wall of the shrine is a bas-relief of an eight-armed figure of Durgā. On each side of the doorway are lion-based pilasters, and panels containing decayed figures of female door-keepers in relief. In front is a little open terrace the floor of which has two socket holes cut in the rock showing that the shrine once had a structural portico erected in front of it. Carved in relief on the north side of the rock is a large crudely executed figure of Durgā's lion attacking the buffalo demon Mahishāsura.

No. 24. (Tigar Cave).—Is situated at Sālavankuppam, a hamlet located in a sandy waste about three miles north of Māmallapuram and on the coast. The place seems to have once been a suburb of Māmallapuram but has since become buried in drift sand. It contains only two monuments of archæological interest, the so-called Tiger Cave and a triple-celled Saiva temple known as Atiranachanda's Mandapa.

The so-called Tiger Cave, is a large rock 60 feet long and 20 feet high, facing south-east (Plate 34 (*a*)). It consists of a shrine cell excavated in the central portion of the rock surrounded by a ring of eleven huge griffin's heads in relief. The cella is empty and measures 7′-6″×3′-10″ and is 5′-9″ high, and apparently was dedicated to Durgā. It has a small portico in front approached by a flight of steps from below. An unfinished convex cornice is carved above the entrance and supported by two rampant lion-based pilasters. The lions project forward and have little riders (Durgā) on their backs. In style they are similar to the lion pillars of the Rajasimha period as exemplified in the Shore Temple. On the proper right of this shrine are two little square niches with semi-circular mouldings round them, each with a large bas-relief of an elephant's head below indicating Indra shrines. Between the niches in crude outline is a pillar, and a figure of a horse is carved on the face of the rock at this end. At the other end, is a large unfinished relief representing Durgā's lion. This monument and the carved rocks near the Shore Temple are all similar in style and belong to the same period. They are not in the Māmalla style and appear to be considerably later, and in all probability, they belong to the Rājasimha period.

No. 25. (Atiranachanda's Mandapa).—This is a rather puzzling monument as the primitive style of its façade is in keeping with the earlier monuments excavated during the Māmalla period, but the three black stone fluted lingas and Somaskanda panels within the temple clearly denote a much later period (Plate 34 (*b*)). On plan the temple consists of a hall about 28 feet long, 6 feet wide and 6½ feet high, with a small cella 3½ feet square cut in the back wall and facing the east. The façade has two plain cubical pillars with corbel capitals decorated with the roll ornament on the underside, and corresponding pilasters at each end. They are similar to the pilars belonging to Dharmarāja's Mandapa (Plate 4). The convex cornice and simulated roof line above it are unfinished. The floor and the ceiling of the hall are also unfinished. The plan of the temple shows that it was originally designed to contain a single *linga* only and was never intended as a triple-celled shrine. The temple now contains three fluted *lingas* like those belonging to the Rājasima period (Plate 18 (*b*)). A large one in the shrine cell, and a smaller one set up at each end of the hall, and each is provided with a bas-relief Somaskanda panel carved on the back wall. These panels are similar to the one illustrated in Plate 16 (*c*), and like the *lingas* appear to belong to the Rājasimha period. The two smaller *lingas* at each end of the hall are without shrine

cells, a very unusual feature, clearly indicating that they are later additions. Standing outside the temple, set up in the open, is a tall cylindrical granite *linga* of an earlier type than the three fluted black stone ones inside the temple, and it is possible that this granite *linga* may have originally occupied the cella and was cast out to make room for the fluted one now within. On each side of the shrine entrance is a figure of a two-armed doorkeeper leaning on a club. In style they appear to be a little later than those of the Māmalla period, and yet, not so late as those of the Rajasima period. Standing against the south wall of the hall is a detached stone slab containing a crudely carved bas-relief of Siva with four arms and accompanied by two *ganas*. It looks as though this slab had been removed from the enclosure of the Shore Temple. There is also a headless image, carved in the round, lying outside the temple, perhaps a broken image of Kubera ; and inside the hall a large broken image of Vishnu, also carved in the round. These two images are comparatively modern and do not belong to the Pallava period. It is quite clear that the temple has undergone several changes since the excavation was first started. From its architectural style and unfinished condition, it looks as though the temple was probably begun in Māmalla's reign, but not finished and used for worship until a later period, when the three *lingas* and Somaskanda panels were added. The temple contains several brief Sanskrit inscriptions from which we learn that it was dedicated to Siva by a king named Atiranachanda who named it after himself *Atiranachandesvara, i.e.,* "The Isvara (temple) of Atiranachanda." The name (or surname) of Atiranachanda is unknown from other sources. The other *birudas* or surnames mentioned in the inscriptions in this temple, are the same as those appearing in the inscriptions at Māmallapuram. As usual no date is given, so we may presume that Atiranachanda was one of the many surnames of Rājasimha, and that it was during his reign that the three fluted *lingas* and Somaskanda panels were introduced and the temple consecrated and used for worship.

I have included monuments Nos. 22, 23 24 and 25 here, so as to complete the account of all the rock-cut monuments belonging to this group, but in all probability, these four monuments really belong to the Rājasimha period although they are not structural buildings like the Shore Temple. In my opinion the so-called Tiger Cave and the carved Durgā shrines near the Shore Temple, represent the latest rock-cut monuments excavated by the Pallavas, either just before, or at the very beginning of Rājasimha's reign, when structural buildings began to take the place of the old rock-cut shrines and memorials of the earlier period.

Trichinopoly Temple.—Before closing this account of Pallava monuments in the so-called Māmalla style, I would like to call attention to an unfinished excavation at the foot of the famous "Rock" at Trichinopoly, and another temple further South, which on purely architectural grounds, appear to belong to about the same period as the rock-cut monuments at Māmallapuram. There

are two excavations in the Trichinopoly Rock, one half-way up the hill and the other at the bottom. The upper one we know was excavated by the great Mahēndra and is one of the earliest Saiva temples in Southern India (*Vide Part I of this work*). The lower temple is obviously later than the upper one, but it is clearly a Pallava monument and appears to belong to the Māmalla period. Trichinopoly seems to have formed an important outpost of the southern frontier of the Pallava dominions, and doubtless a governor and a garrison were stationed there to maintain order and to prevent their neighbours further south from encroaching upon their territory. The temple contains no Pallava inscriptions, but then it was never completed. The signatures of three private individuals in later Tamil characters of about the thirteenth century A.D. are engraved on one of the pillars.

The temple consists of a large rock-cut hall 25½ feet long and 21 feet wide with an unfinished shrine chamber at each end. The back wall is divided up into five large panels each containing a bas-relief four-armed figure of the following deities :—Ganēsa, Siva, Durgā, Sūrya and Brahmā. In style these figures closely resemble those at Māmallapuram but are inferior in execution. The four-armed figure of Durgā, standing very erect on an unfinished lotus pedestal with two male worshippers crouched at her feet, seems to be a copy of the image of that goddess portrayed in the so-called Draupadī's Ratha (No. 5). Like the latter, the worshipper on Durgā's proper right is portrayed cutting off his hair as a votive offering to the goddess. All of the images, including Ganēsa, are four-armed and portrayed standing erect with attendant figures kneeling or sitting at their feet, and flying *gandharvas* or *ganas* above in the background. Goblins or *ganas* are depicted round the feet of Ganēsa and Siva, and male worshippers round those of Brahmā, Sūrya and Durgā. Brahmā is shown with three faces, and Sūrya has a large halo at the back of his head. The doorkeepers guarding the entrances into the two unfinished shrine chambers at each end of the hall, are two-armed figures resembling those of the Māmalla period. The shrine on the left as one enters, is provided with a pillared portico, the cornice of which is decorated with the dormer window ornament. The pillars have cushion capitals with corbel brackets above and are similar in style to those appearing in the interior of the Varāha Temple illustrated in Plate 23, the only difference being that their bases are square instead of round. The façade has four pillars of the same type and a frieze of little *ganas* below the cornice which is left plain and unfinished.

In the earlier Pallava monuments, sculptural representations of Ganēsa are rare. Figures of this elephant-headed deity do however occur in connection with the temples at Vallam, Mogalrajapuram, and Bhairavakonda which have been assigned to the Mahēndra period (*Vide Part I*). But these figures are not actually inside the temples in question, but appear as bas-reliefs in panels or niches cut in the rock walls of the terraces in front of the temple and therefore, may possibly, represent later additions.

At Māmallapuram, the only figure of Ganēsa belonging to the Māma period, is the tiny representation of this deity in the centre of the frieze of *ganas* decorating the cornice of Rāmānuja's Mandapa (No. 16). During the Rājasimha period, we find plenty of bas-reliefs of this deity as exemplified in the Shore Temple. In the Trichinopoly temple the figure of Ganēsa is inside the temple, and occupies the same position of importance as the other deities and therefore cannot be a later addition. It would appear that up to the end of the Māmalla period (*circa* 674 A.D.). Ganēsa was regarded as a minor deity of no particular sanctity. It was only in later times that he became a Saiva deity of real importance.

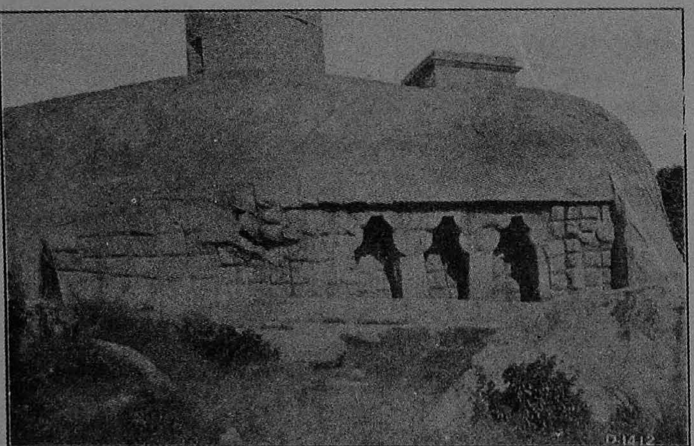
Tirumalaipuram.—This village is situated in the Sankaranayanarkoil Taluk of the Tinnevelly District and 12 miles north-east of Tenkasi railway station. Excavated in a rocky hill known as "Varnachimalai," are two rock-cut temples. One represents an unfinished work of no particular interest, but the other is of considerable importance and appears to be a very early Pallava monument. The façade of the temple is similar to that of Dharmarāja's Mandapa (No. 1), and on plan, it resembles the upper temple in the Trichinopoly Rock. It faces the north, and in order that the shrine chamber should face the east, the cella is excavated in the west end wall, instead of in the centre of the back wall as usual. The cubical portions of the massive pillars are decorated with lotus medallions, and the underside of the corbels with the roll ornament just as in the Mahēndra temple at Trichinopoly. The interior consists of a hall 19 feet long and 12 feet wide. The shrine chamber measures 8 feet square and faces the east. It contains a large *linga* of early pattern. In the centre of the hall is an oblong pedestal containing the remains of a broken stone bull facing the shrine entrance. On each side of the latter are the usual figures of doorkeepers. Carved in bas-relief in three rectangular panels on the back wall are four-armed images of Siva. Vishnu and Ganēsa, and on the east wall, a similar figure of Brahmā. In style and execution these figures resemble those in the lower temple in the Trichinopoly Rock, but the figure of Ganēsa is depicted in a sitting posture instead of standing erect. In the figure of Vishnu the conch and discus symbols are shown without flames of fire. Engraved, on one of the pillars of the façade is a Pāndya inscription of about the 12th century registering a gift of land to the temple by a prince named Chakravartin Srīvallabhadeva. There can be little doubt that this old Saiva temple was excavated by the Pallavas and the style of the bas-relief images it contains seems to indicate that it belongs to the Māmalla period.

There are a few early Pallava monuments in Pudukottai State which I have not seen, as the State employs its own official to look after these and other antiquities discovered there. One of the most interesting of the Pallava temples in this State, appears to be the one at Sittannavasal, 9 miles north-west of Pudukottai. It is a rock-cut Jaina temple with a façade similar to Dharmarāja's Mandapa (No. 1) and contains some mural paintings on the ceil-

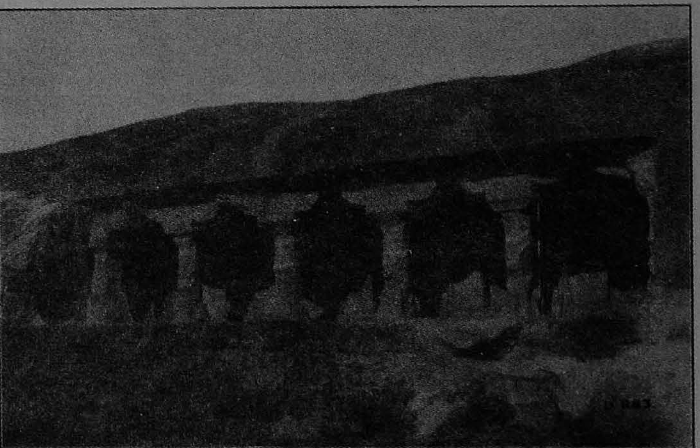
ing and pillars of its façade which are reported to be executed in a style similar to that of the famous frescoes of Ajanta, and the temple has been assigned to the Mahēndra period, before Mahēndravarman I was converted to Saivism by the saint Appar. (*Vide Part I, p.* 7). If this information is correct, then the temple must be even earlier than those of the Māmalla period. However, so far as the latter are concerned, the finest examples of Pallava monuments in this style are those at Māmallapuram described above, and belonging as they do, to three different periods—*an early, an intermediate, and a later period*, it is possible to study the whole history of Pallava Architecture on the spot without bothering about the few other examples elsewhere.

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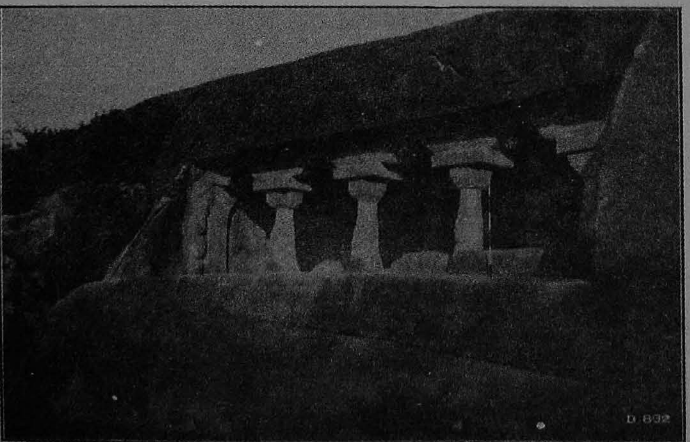
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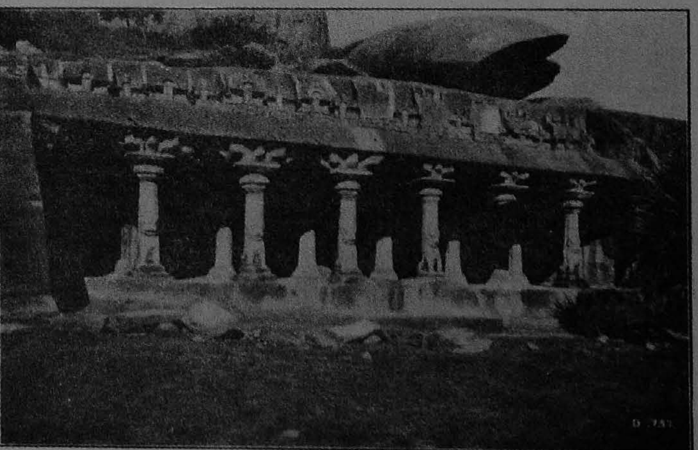
(*a*) METHOD OF EXCAVATION: FIRST STAGE.



(*b*) METHOD OF EXCAVATOIN: SECOND STAGE.

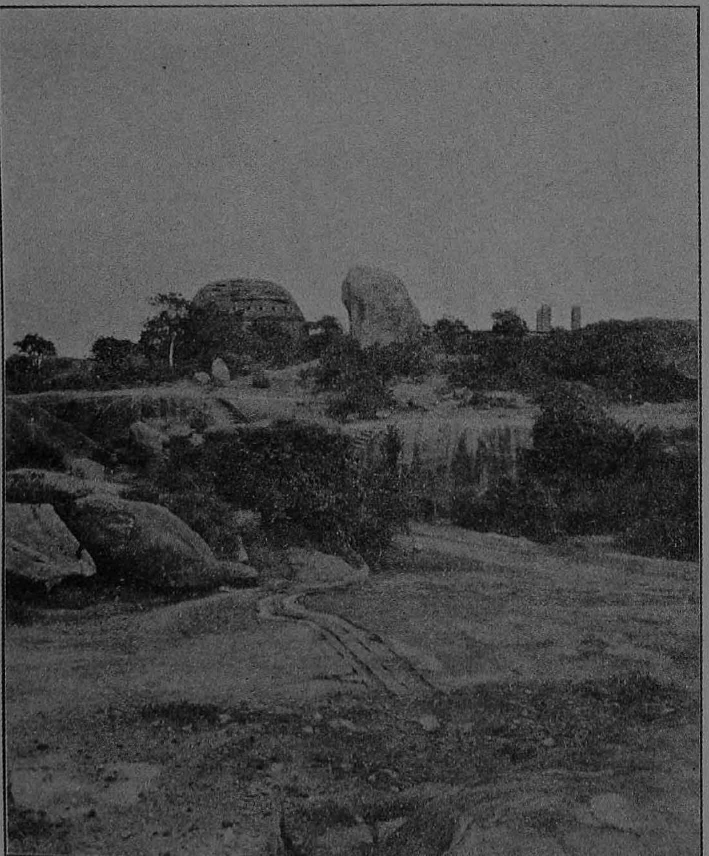


(*c*) METHOD OF EXCAVATION: THIRD STAGE.

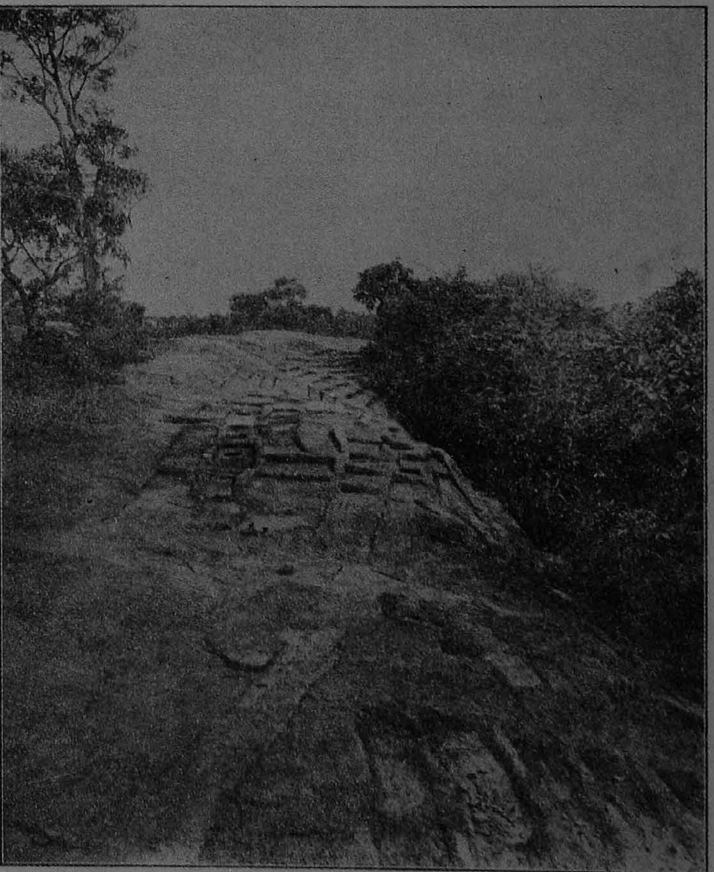


(*d*) METHOD OF EXCAVATION: THE FINISHED FAÇADE (TEMPLE NO. 17).

PLATE I.

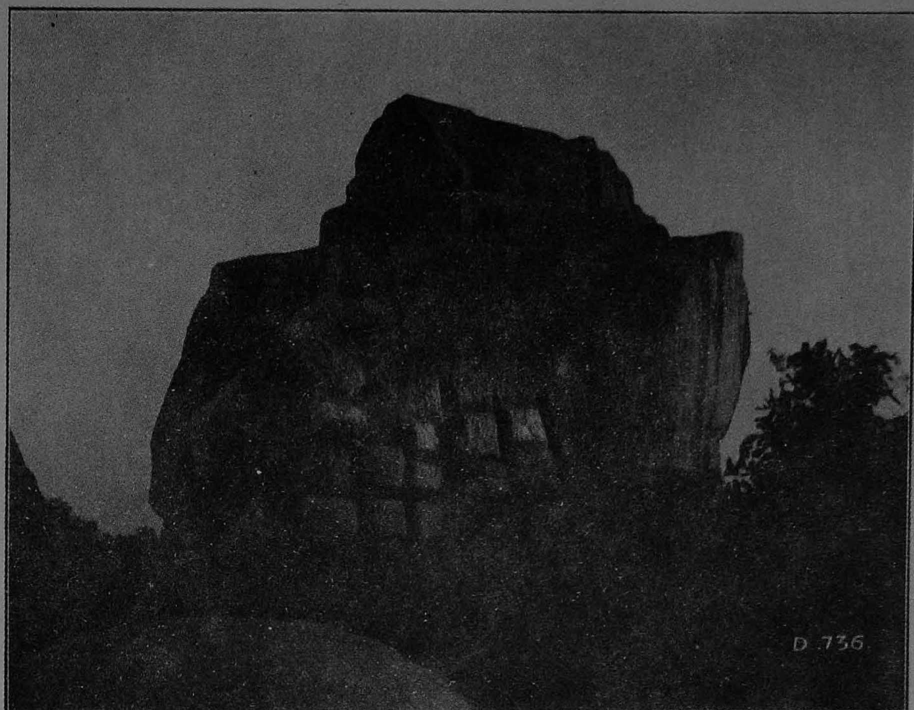


(*a*) Remains of Reservoir in Citadel.

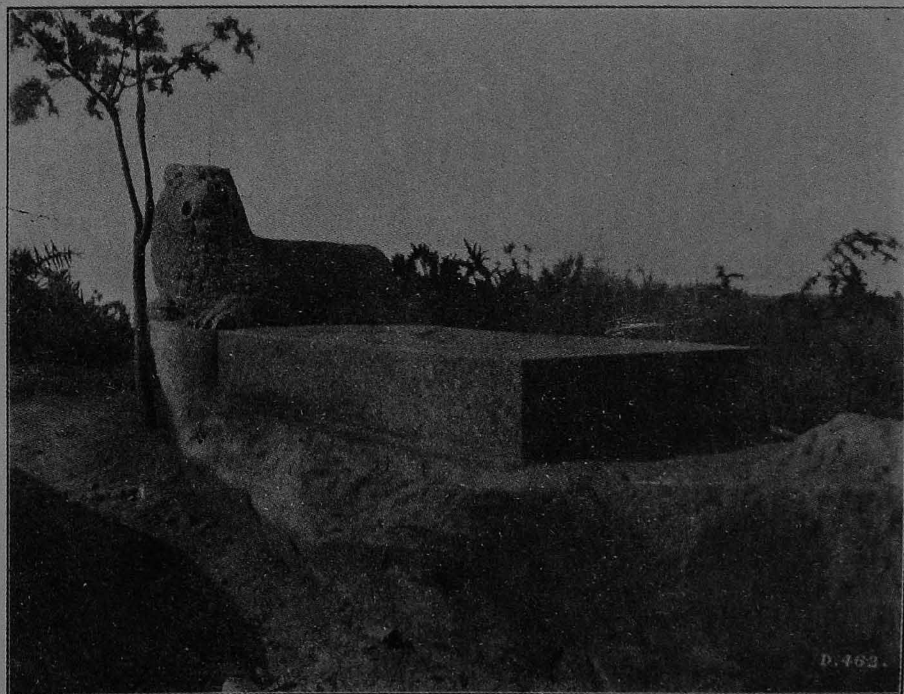


(*b*) Rock-cut Foundations for Masonry Walls in Citadel.

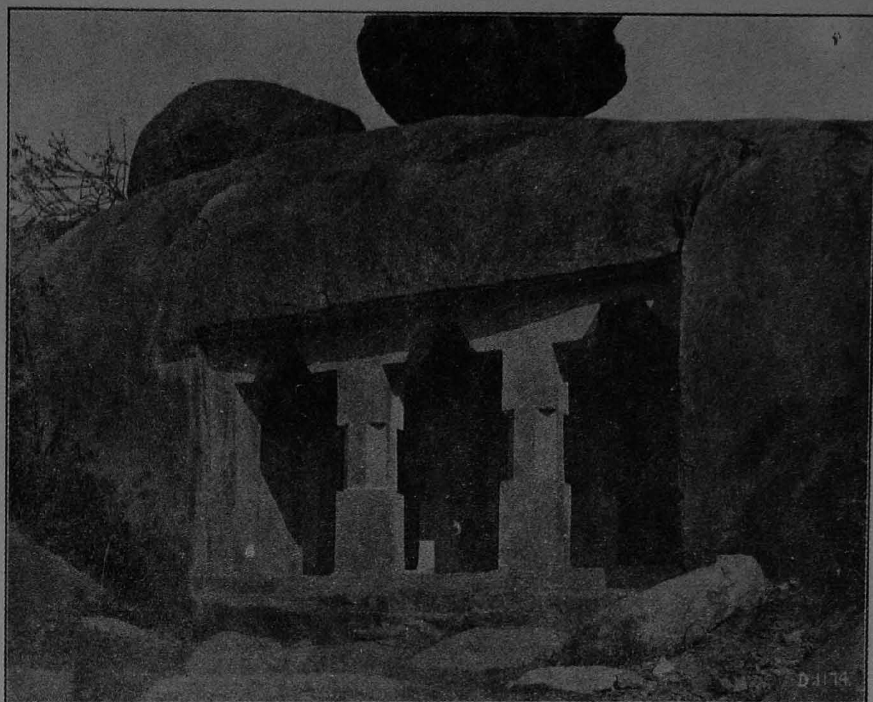
Plate II.



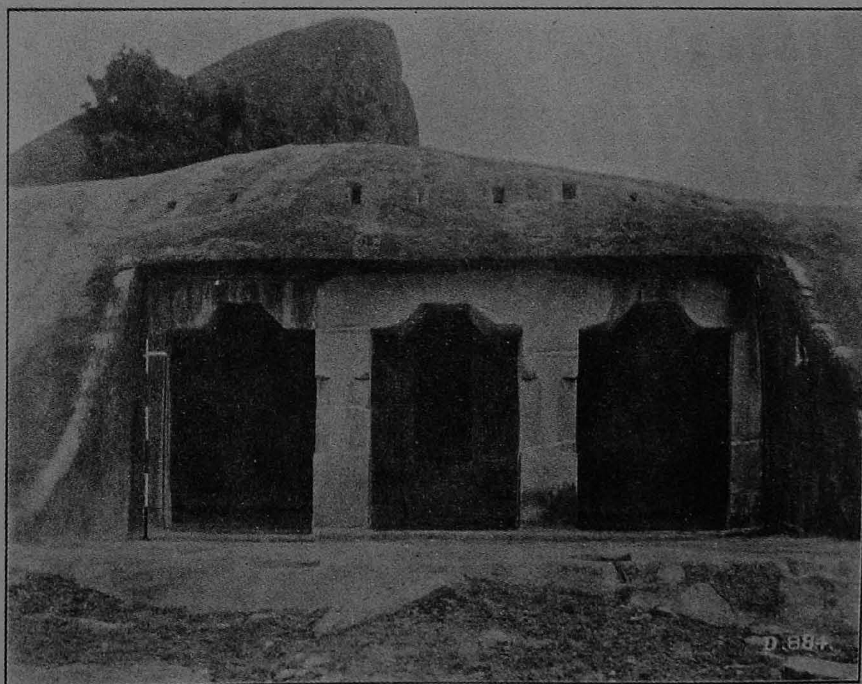
(*a*) METHOD OF EXCAVATING A RATHA.



(*b*) THE LION THRONE IN CITADEL.

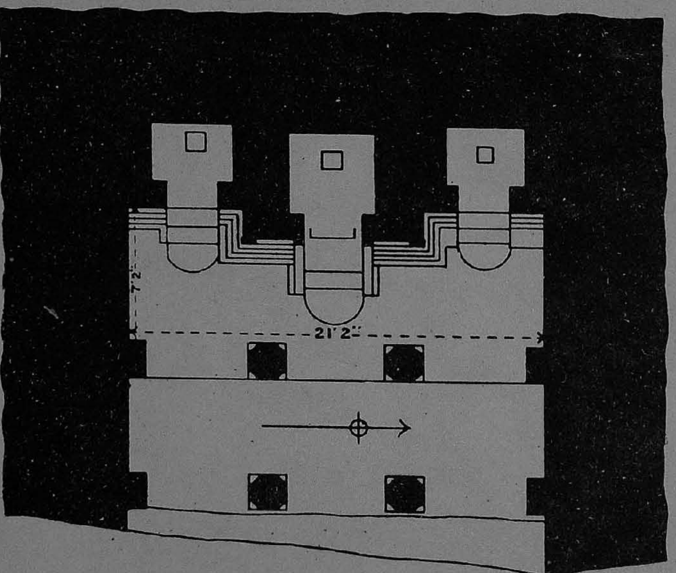


(*a*) DHARMARAJA'S MANDAPA (No. 1).

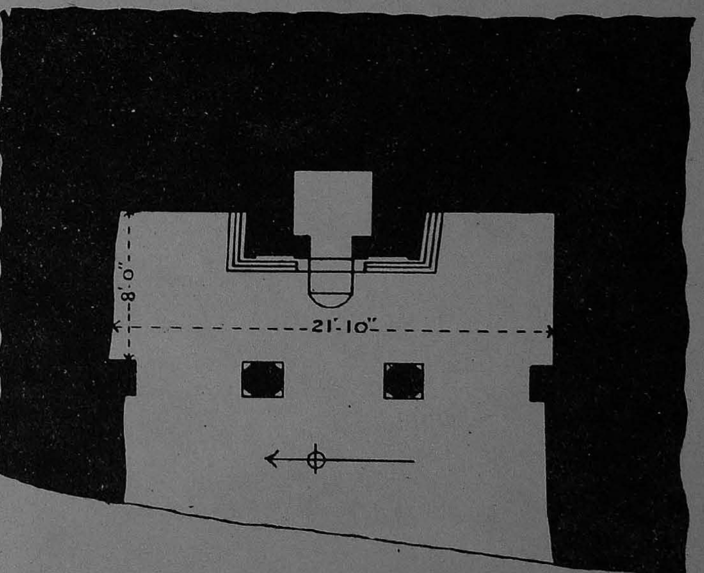


(*b*) KOTIKAL MANDAPA (No. 2).

(a) DHARMARAJA'S MANDAPA (No. 1)



(b) KOTIKAL MANDAPA (No. 2)



PLAN

Scale of 10 5 0 10 20 30 40 Feet

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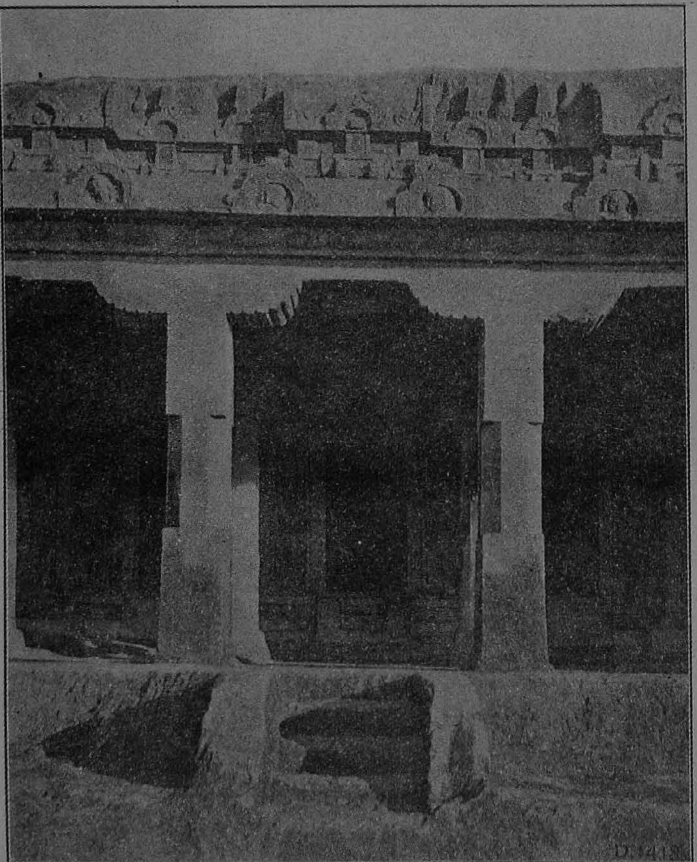
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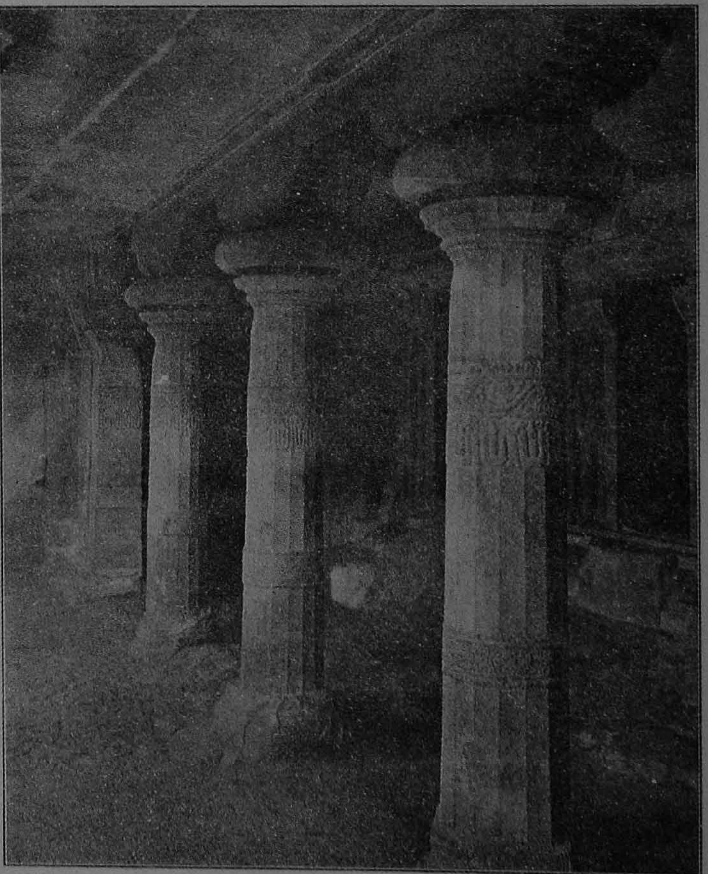
(*a*) TEMPLE NO. 3.



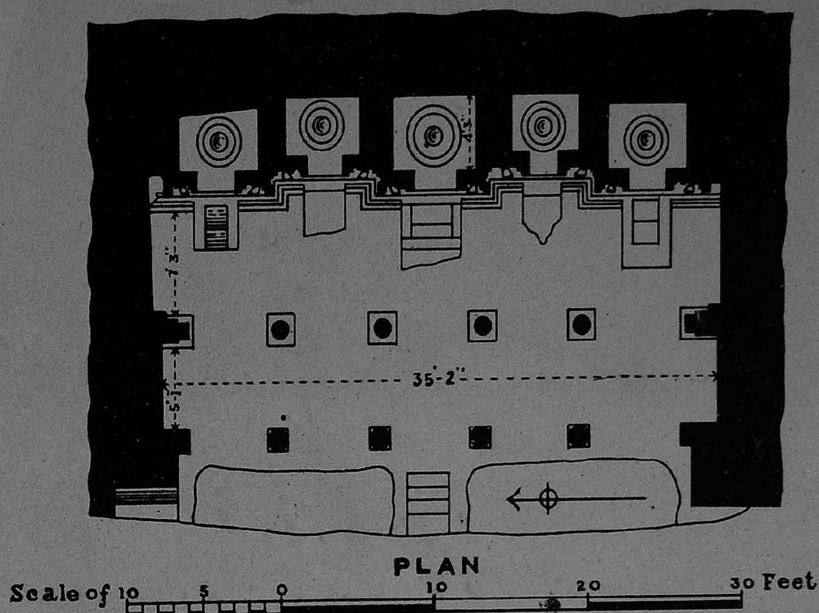
(*b*) TRIMURTI TEMPLE (NO. 4).



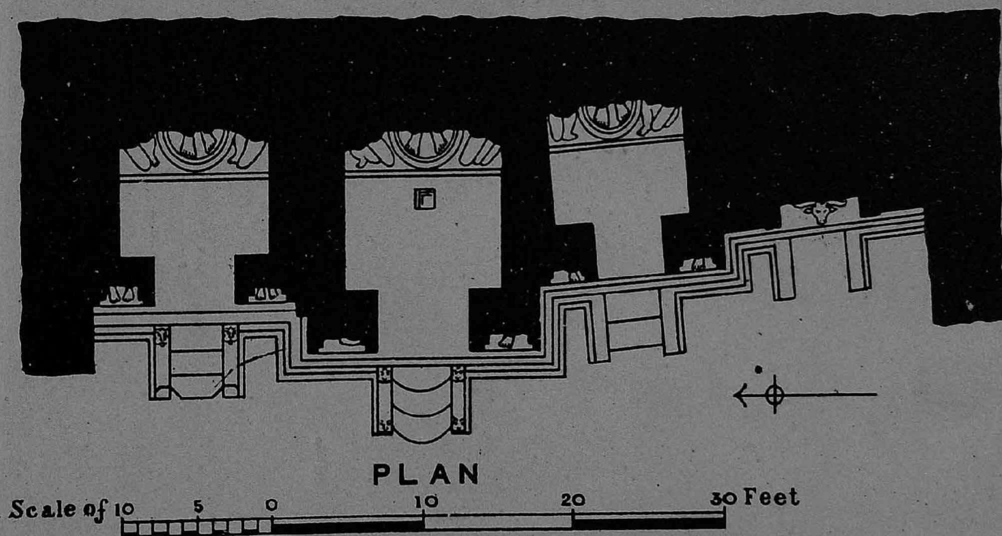
(*a*) TEMPLE NO 6: PILLARS OF THE FACADE.



(*b*) TEMPLE NO. 3: PILLARS OF THE BACK ROW.



(a) TEMPLE No. 3.



(b) TEMPLE No. 4.

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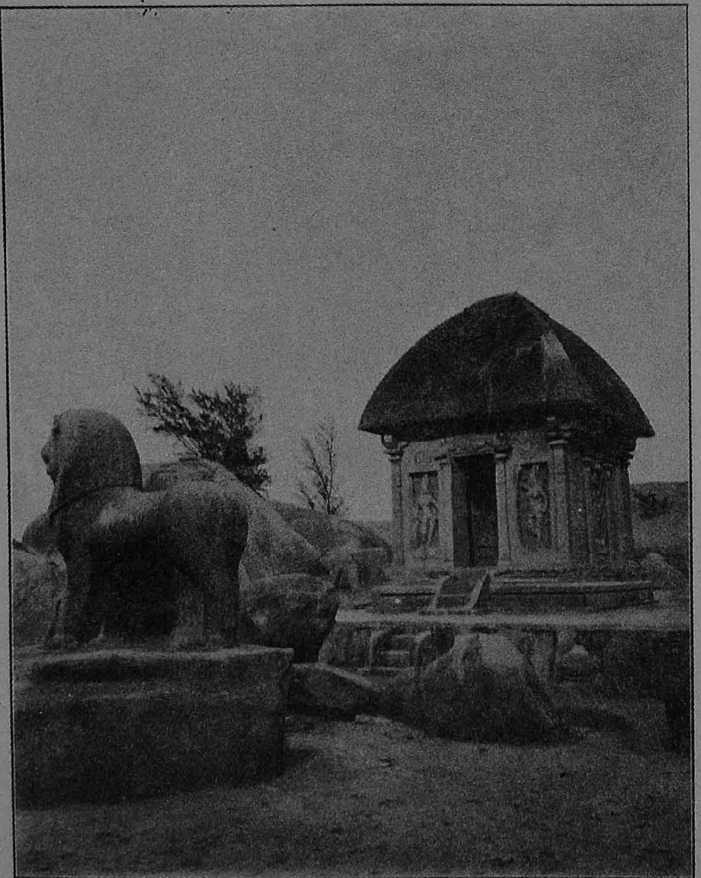
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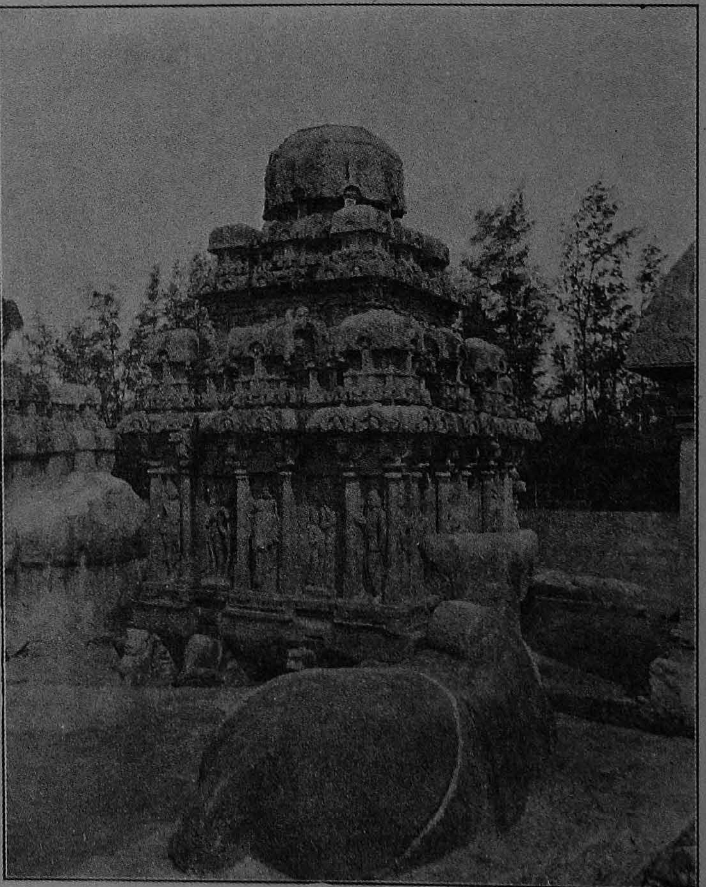




TRIMURTI TEMPLE (NO. 4): IMAGES OF BRAHMA, SIVA AND VISHNU.



(*a*) DRAUPADI'S RATHA (No. 5).

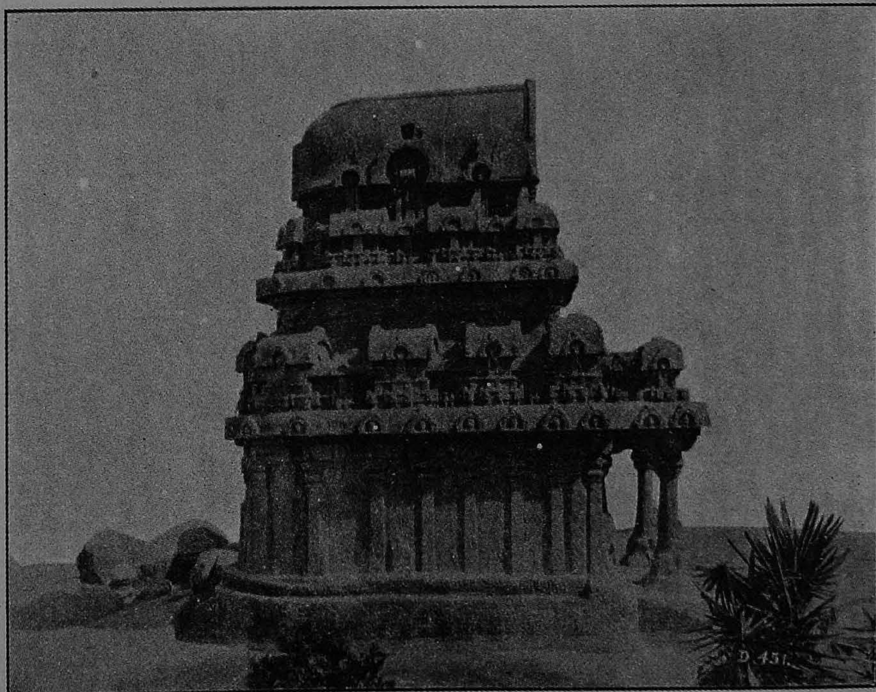


(*b*) ARJUNA'S RATHA (No. 6).

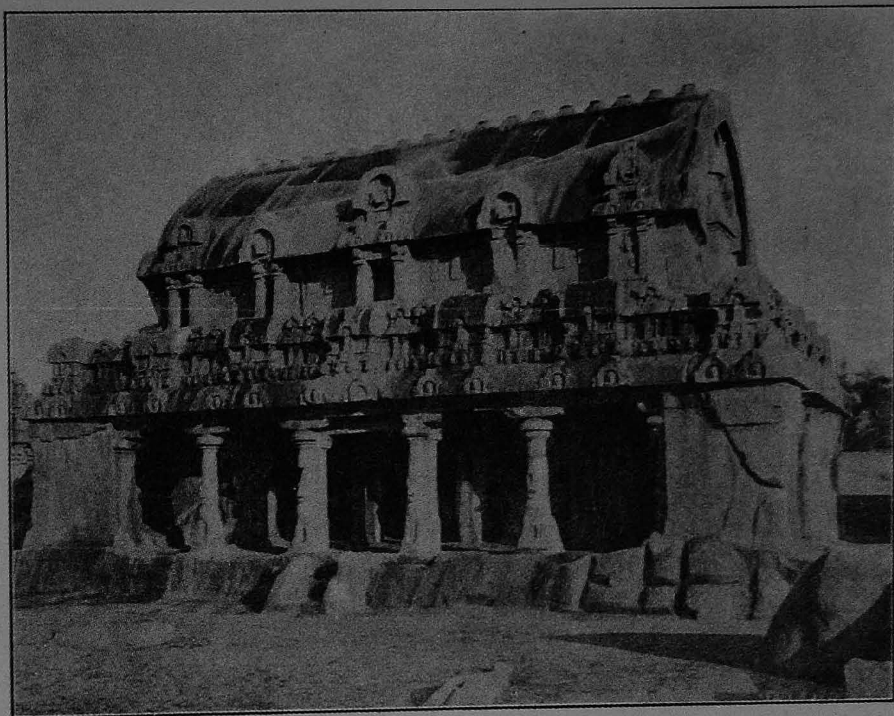
PALLAVA ARCHITECTURE.



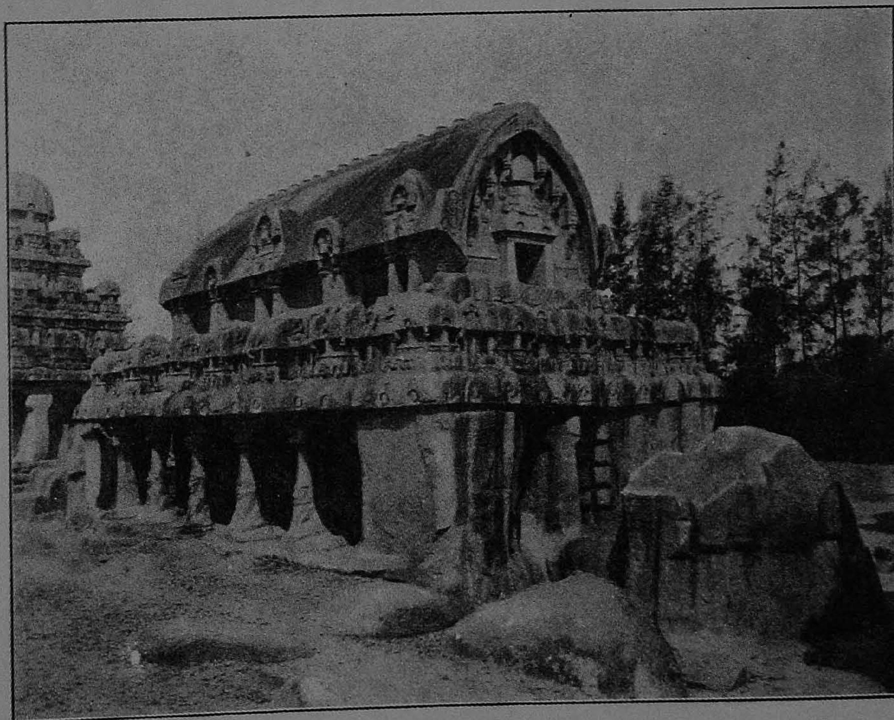
(*a*) SAHADEVA'S RATHA (NO. 7): GENERAL VIEW.



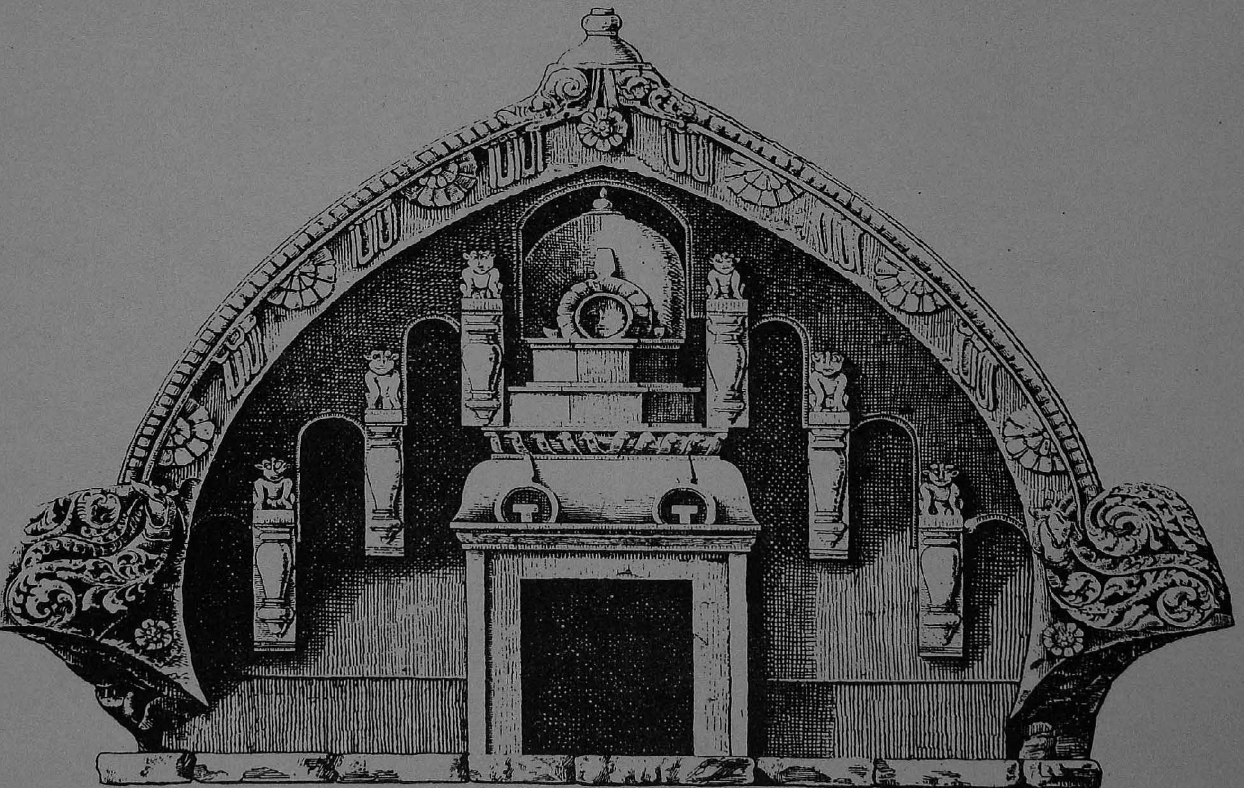
(*b*) SAHADEVA'S RATHA (NO. 7): SIDE ELEVATION.



(*a*) BHIMA'S RATHA (NO. 8): FRONT VIEW.



(*b*) BHIMA'S RATHA (NO. 8): BACK VIEW.

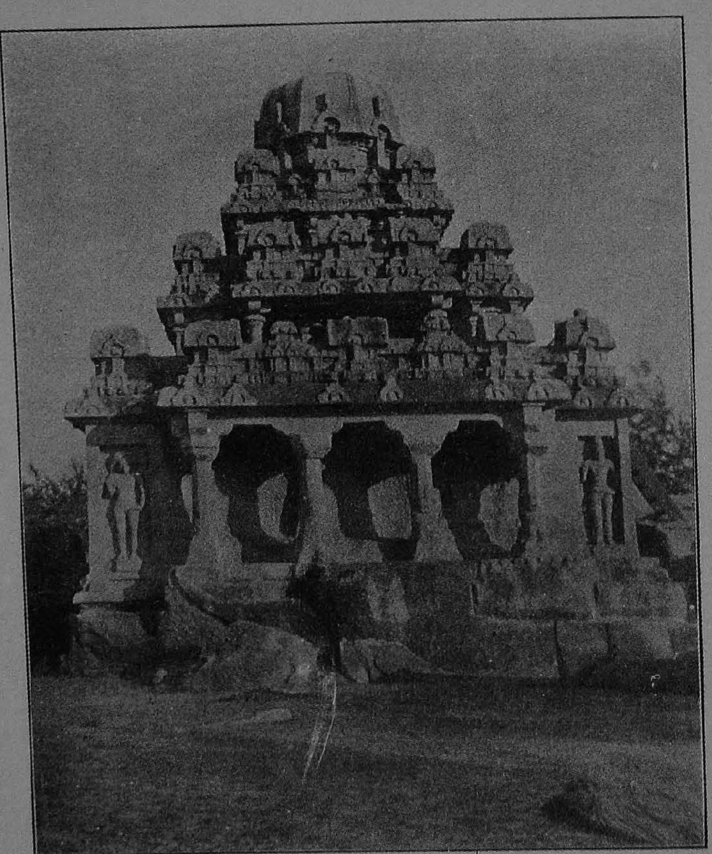


Scale of 5 4 3 2 1 0 5 10 Feet.

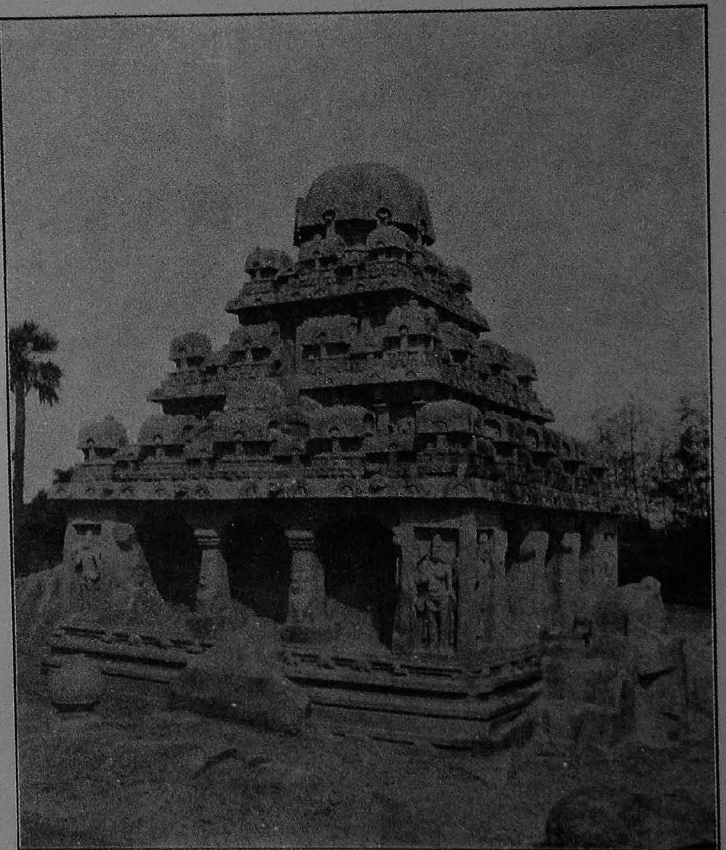
BHIMA'S RATHA (NO. 8): DETAIL OF NORTH GABLE.

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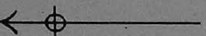
HELIO. S. I. O., CALCUTTA.

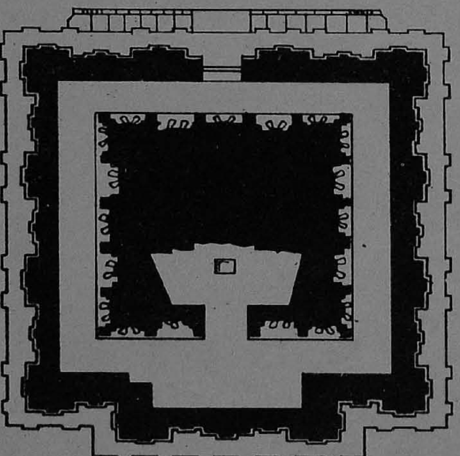


(*a*) DHARMARAJA'S RAṬHA (NO. 9): FRONT VIEW.

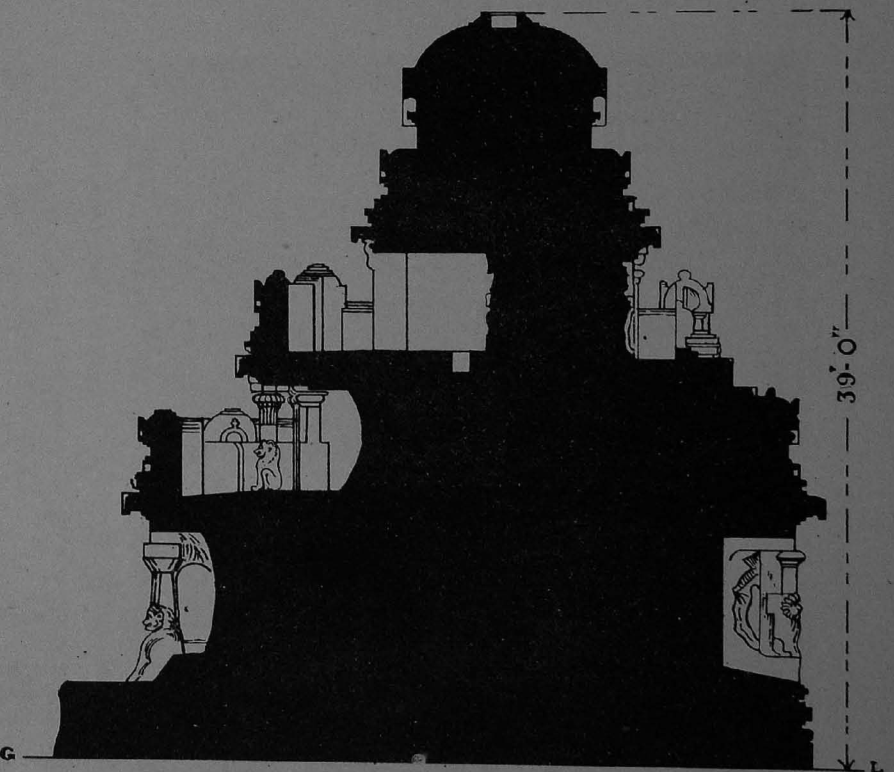


(*b*) DHARMARAJA'S RATHA (NO. 9): BACK VIEW.





PLAN OF TOP STOREY



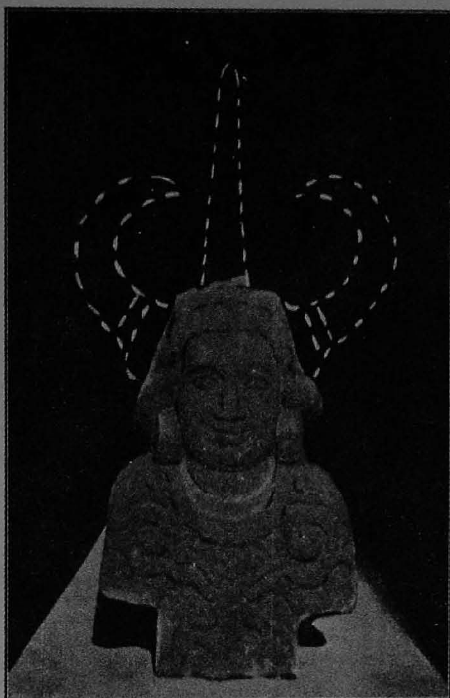
SECTION

Scale of 10 5 10 20 30 40 50 Feet

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DHARMARAJA'S RATHA (No. 9)

Helio. S. I. O., Calcutta



(a) TRIDENT-HEADED SAIVA IMAGE.

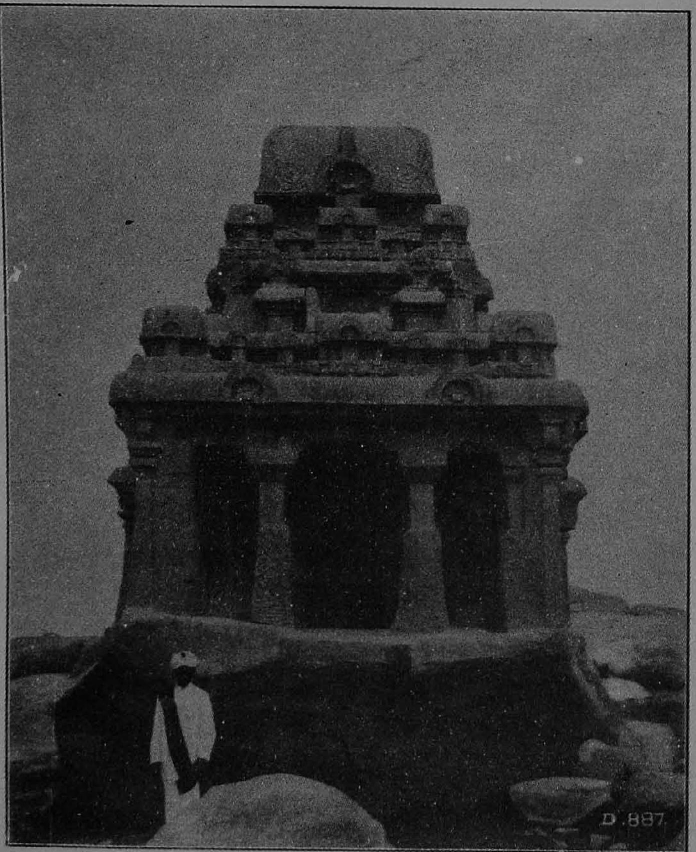


(c) SOMASKANDA PANEL.



(b) SOUTH GABLE OF GANESA TEMPLE.

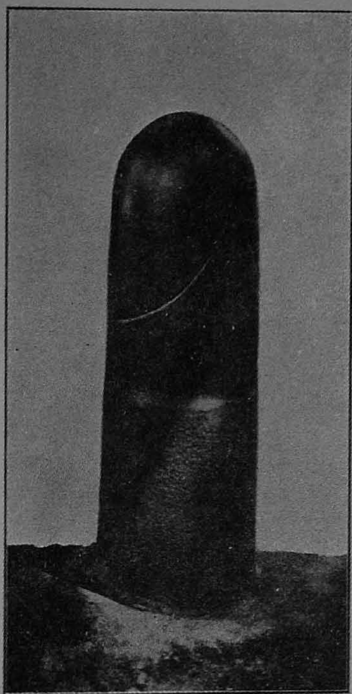
PALLAVA ARCHITECTURE.



(*a*) VALAIYANKUTTAI RATHA (No. 10).



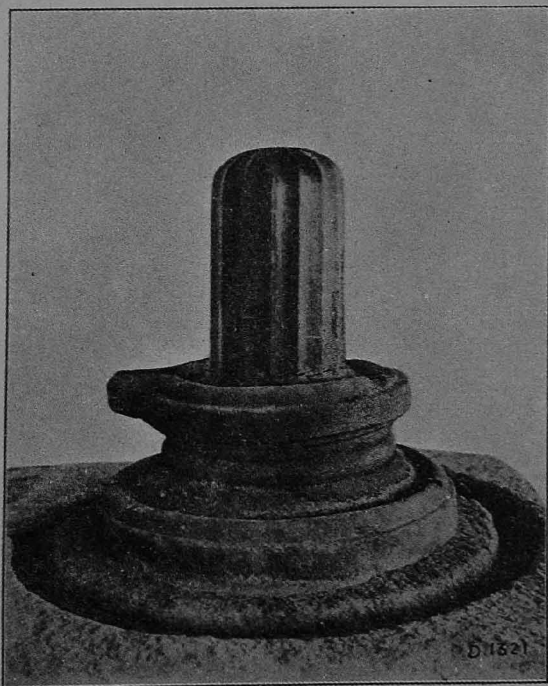
(*b*) GANESA TEMPLE (No. 12).



a.



c.

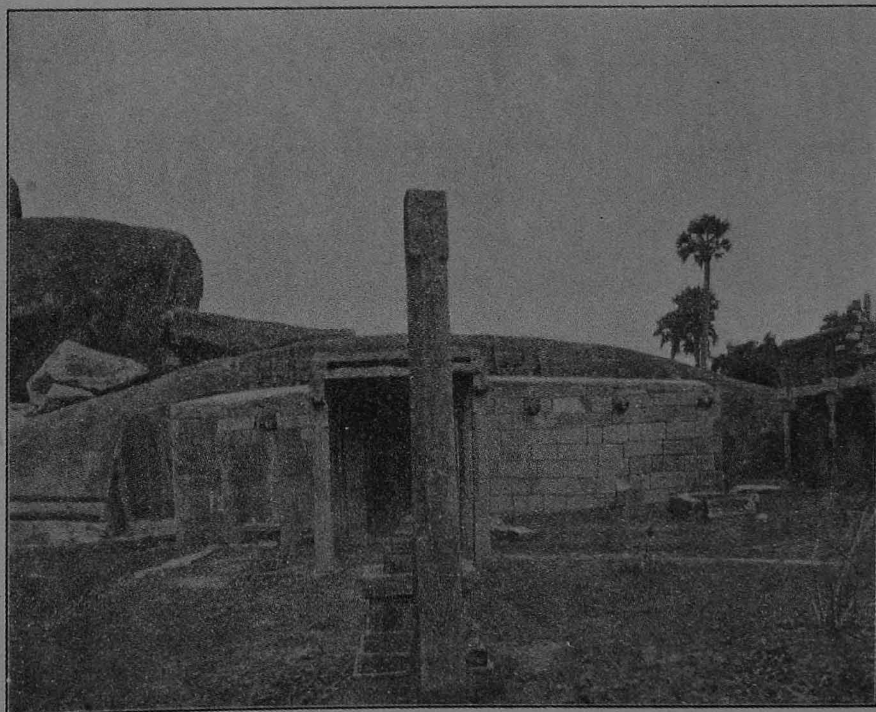


b.

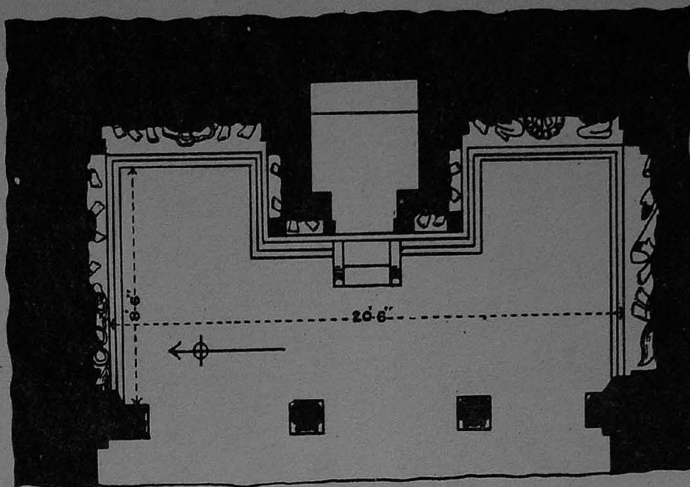
TYPES OF PALLAVA LINGAS.



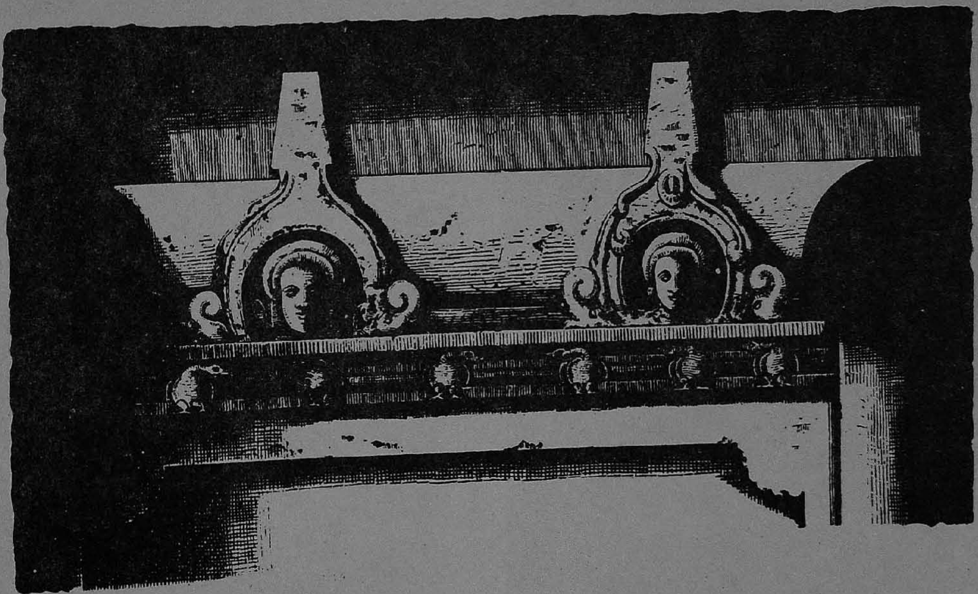
(*a*) VARAHA MANDAPA (No. 13).



(*b*) VARAHA TEMPLE (No. 14).



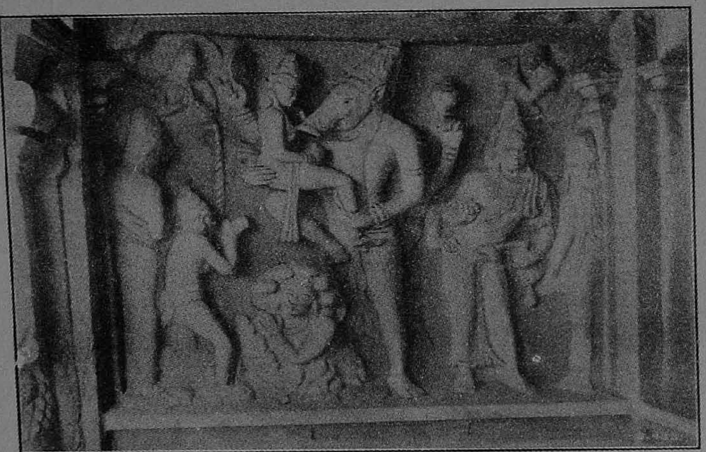
(a) VARAHA MANDAPA (No. 18).



(b) VARAHA MANDAPA (No. 18): DETAIL OF CORNICE

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(*a*) BOAR INCARNATION.



(*b*) DWARF INCARNATION.



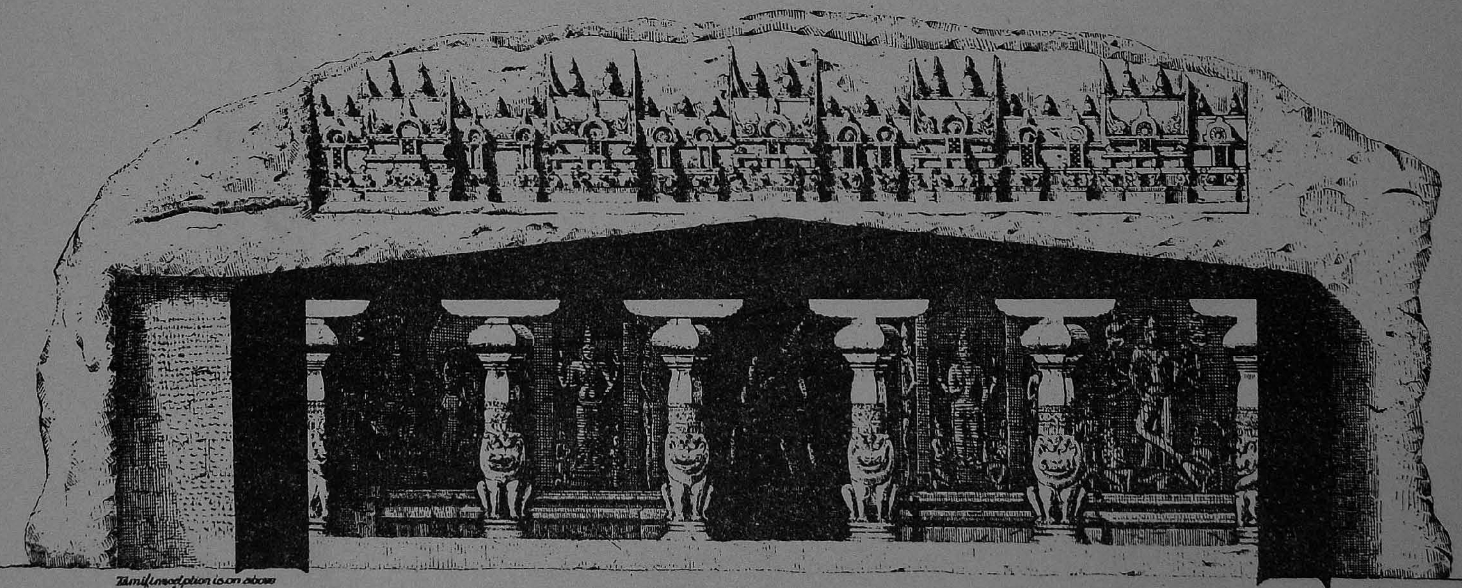
(*c*) LAKSHMI.



(*d*) DURGA.

VARAHA MANDAPA (No. 13).

PALLAVA ARCHITECTURE.



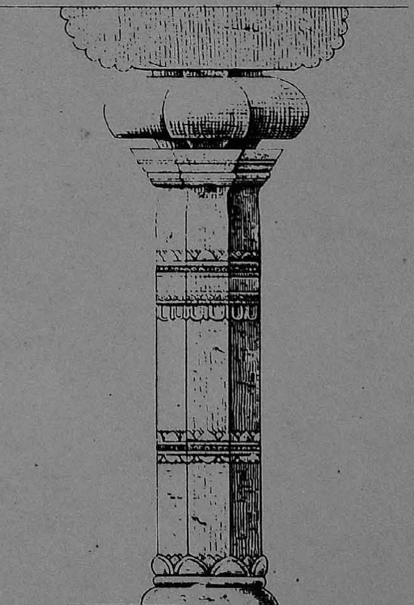
VARAHA TEMPLE (NO. 14): SECTION THROUGH MODERN MANDAPA, SHOWING ELEVATION OF ORIGINAL TEMPLE.

PLATE XXII.

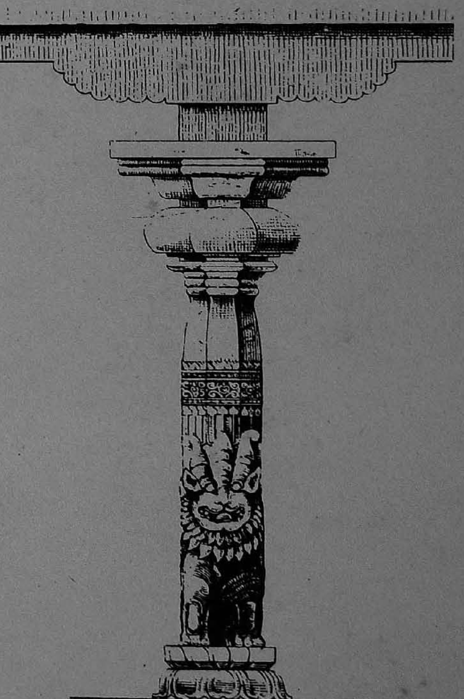
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Pillar in Ganesa Temple.



Pillar in Varaha Temple.



Pillar in Temple (NO. 13.)

Scale of 12 9 6 3 0 1 2 3 Feet.

Scale of 12 9 6 3 0 1 2 3 4 5 Feet.

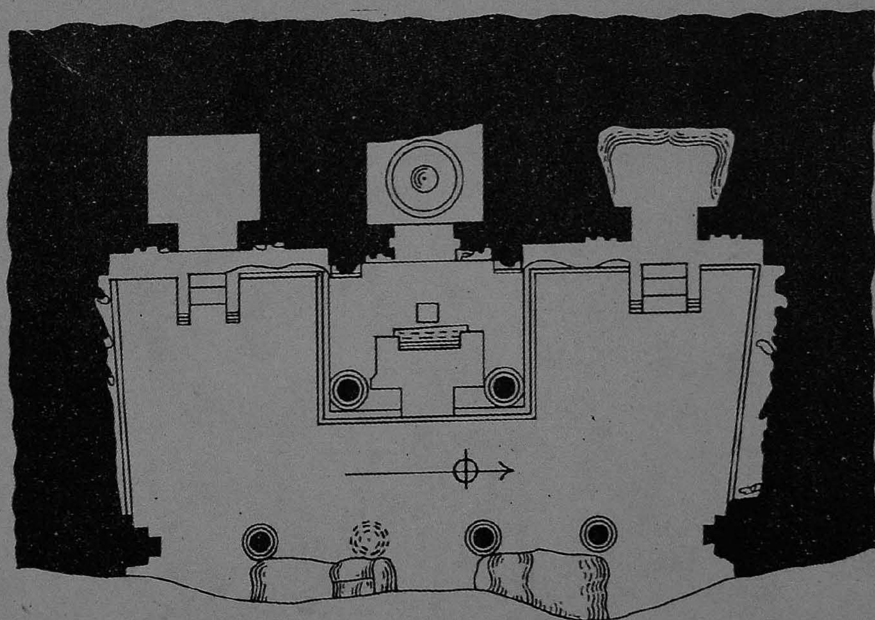
TYPES OF PILLARS OF THE MAMALLA PERIOD.

Reg. No. 2995 E/27. 503

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(*a*) MAHISHASURA MANDAPA (No. 15): FAÇADE.



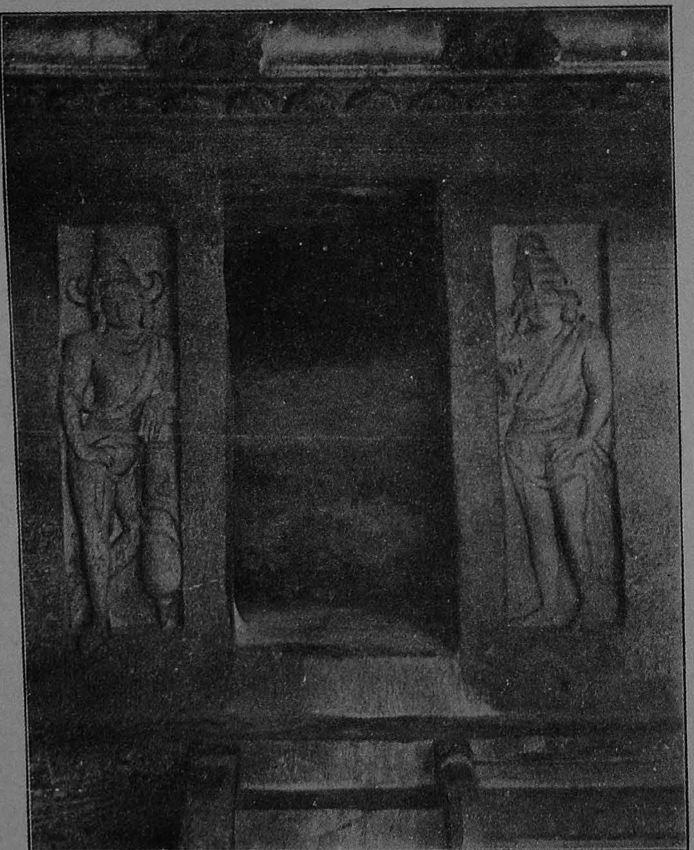


(*a*) VISHNU PANEL.

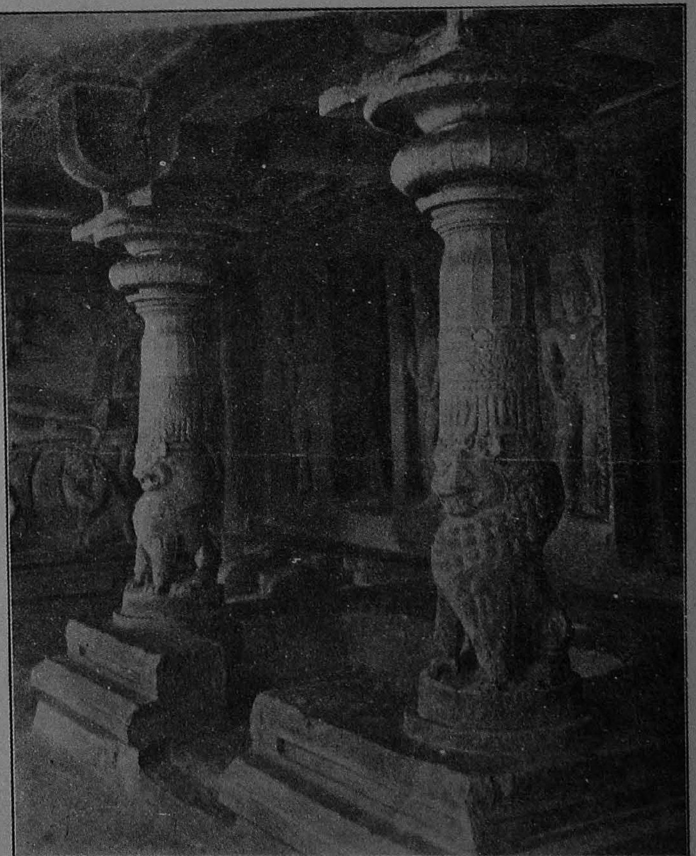


(*b*) DURGA PANEL.

MAHISHASURA MANDAPA (NO. 15).

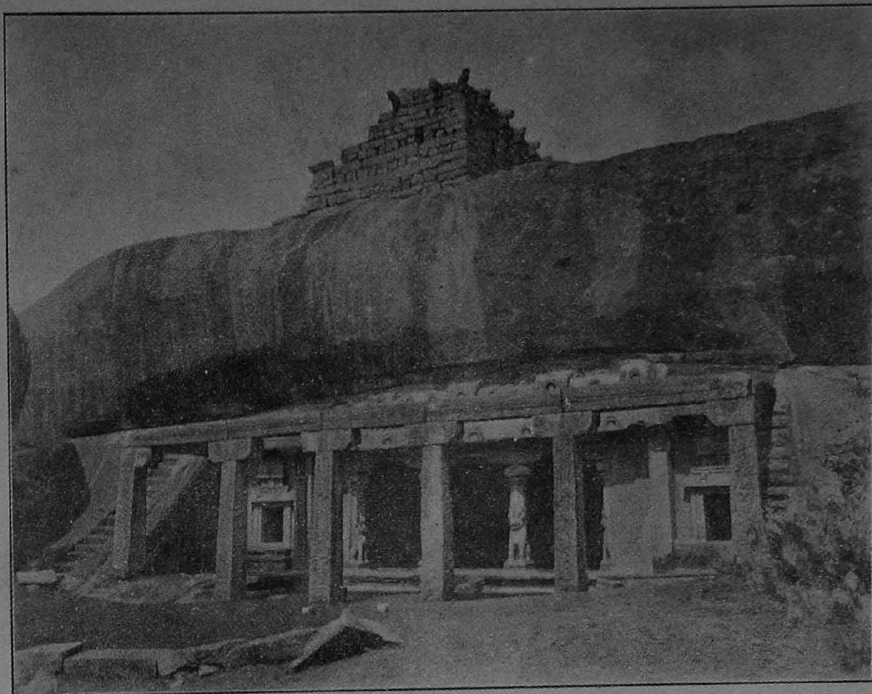


(*a*) DETAIL OF DOORKEEPERS.



(*b*) DETAIL OF PILLARS OF SHRINE PORTICO.

MAHISHASURA MANDAPA (No. 15).



(*a*) FACADE.



(*b*) DETAIL OF LION PILLARS.

RAMANUJA'S MANDAPA (No. 16).

PLATE XXVIII.



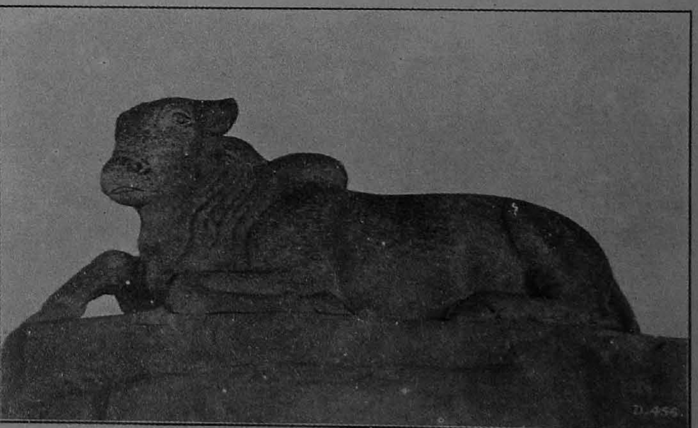
(a) GOVARDHANADHARA KRISHNA.



(b) COWHERD AND COW.

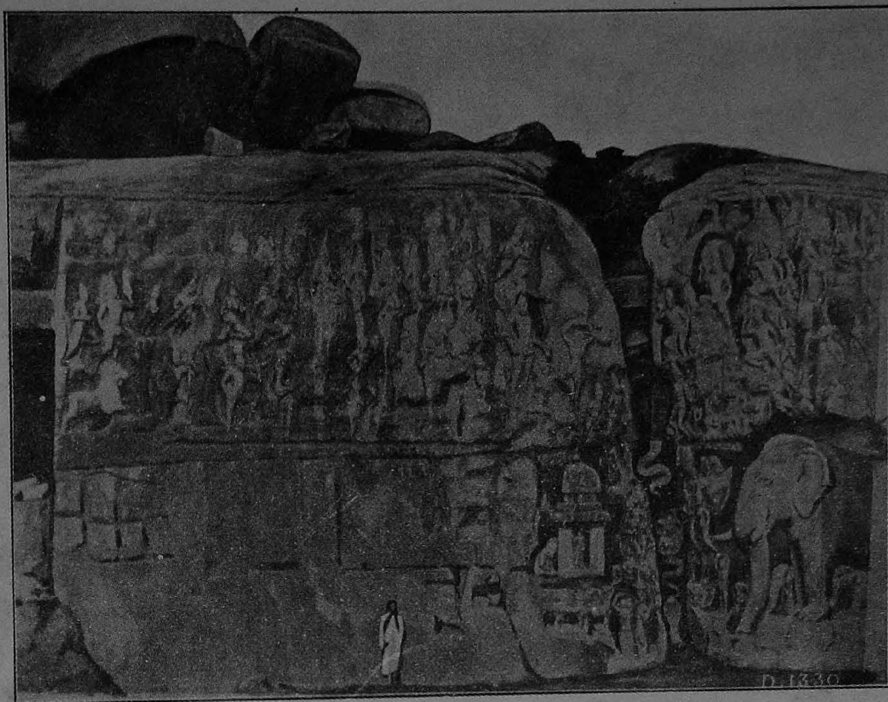


(c) GROUP OF LIONS AND GRIFFINS.

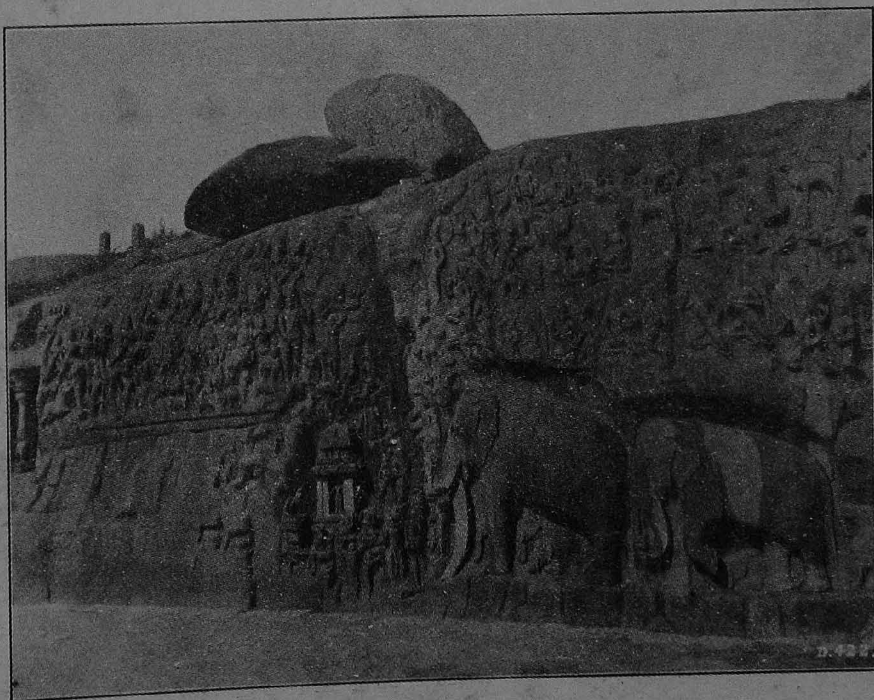


(d) DETAIL OF BULL.

KRISHNA MANDAPA (No. 18).

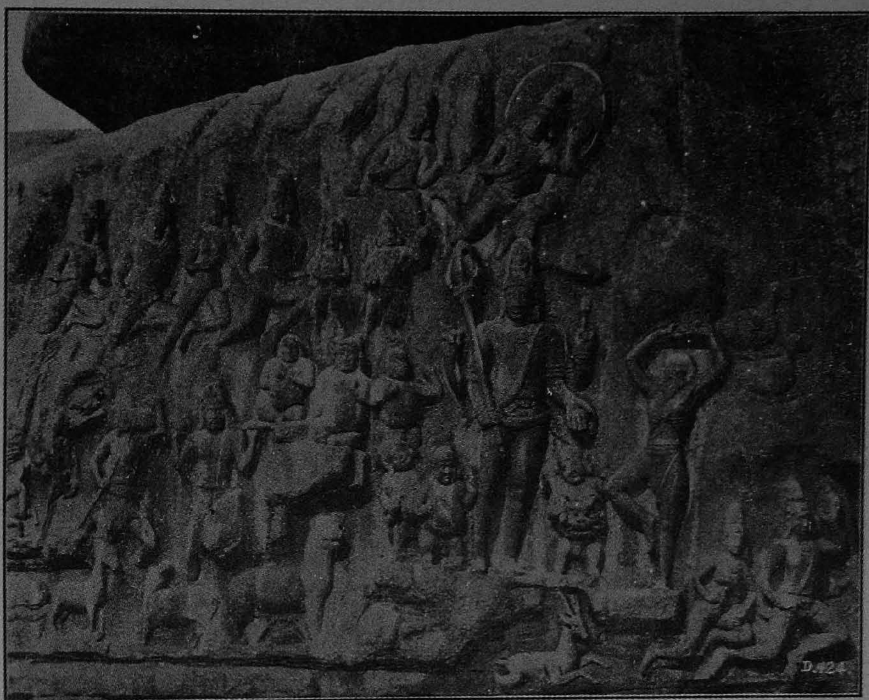


(*a*) GENERAL VIEW, BEFORE REPAIRS.

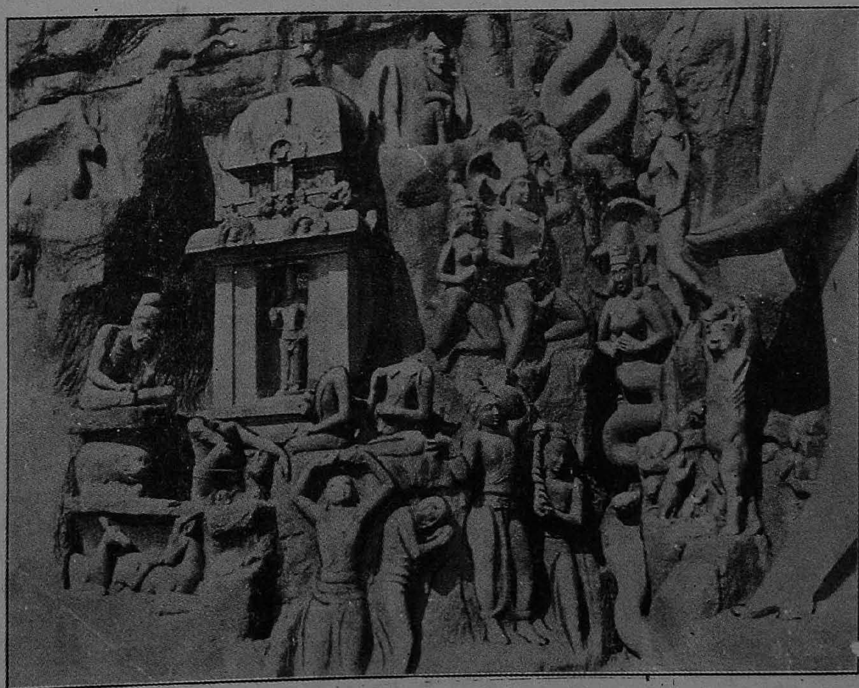


(*b*) GENERAL VIEW, AFTER REPAIRS.

ARJUNA'S PENANCE (NO. 19).



(*a*) SIVA AND THE ASCETIC.



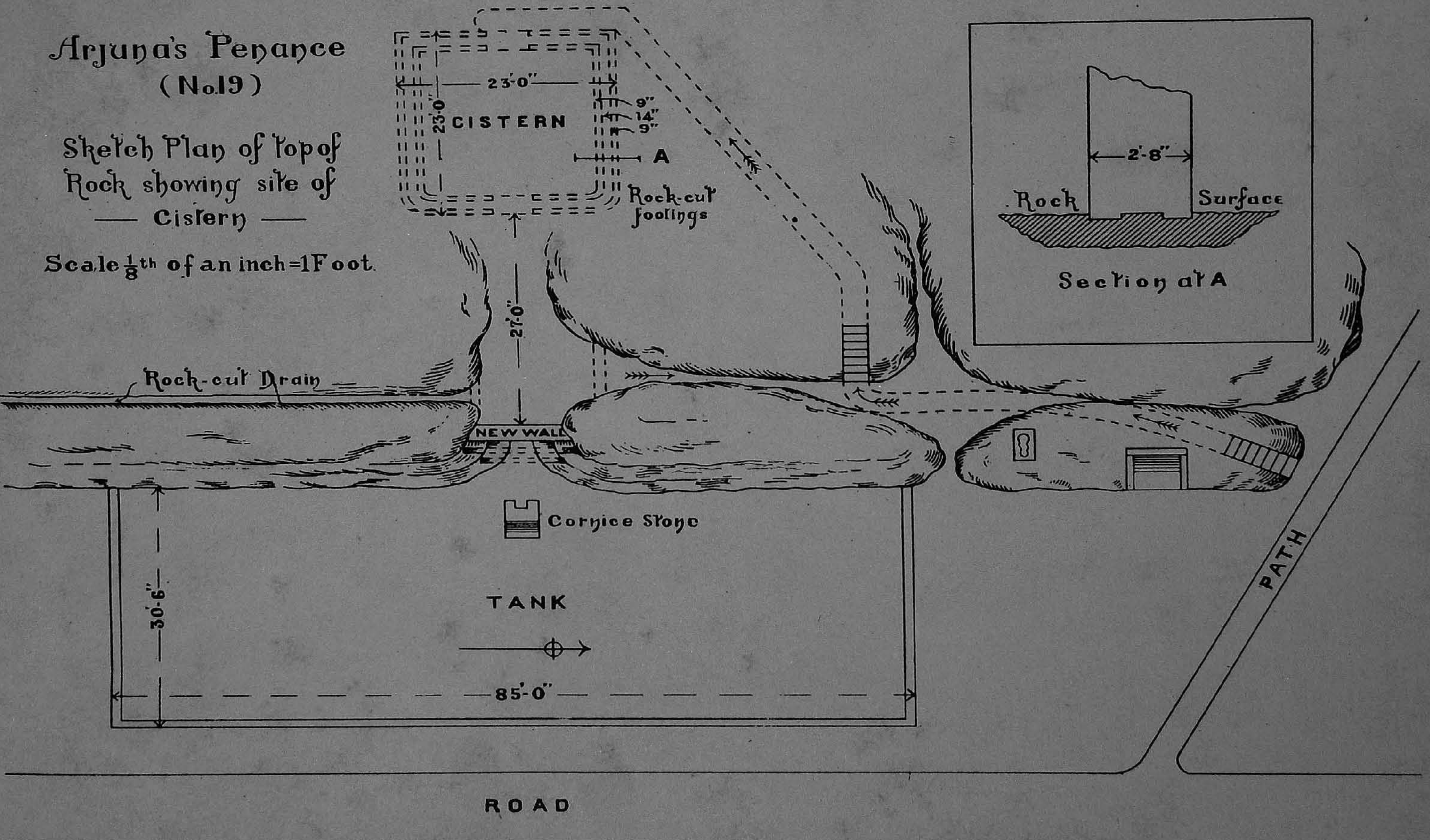
(*b*) GROUP OF ASCETICS IN FRONT OF TEMPLE.
ARJUNA'S PENANCE (No. 19).



(*a*) Detail of two ascetics, one holding a Cornucopia.

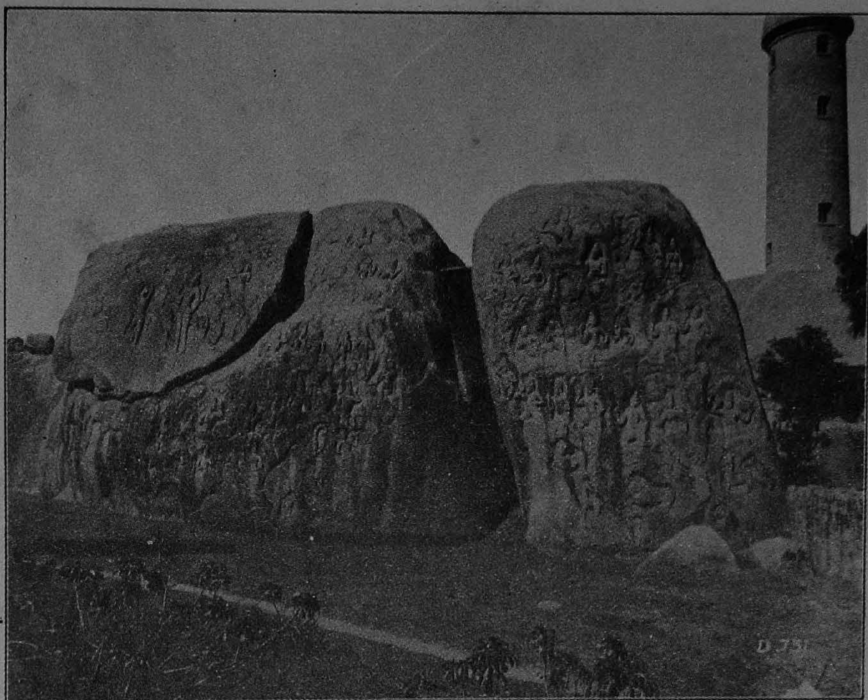


(*b*) Detail of the Cat and the Mice.



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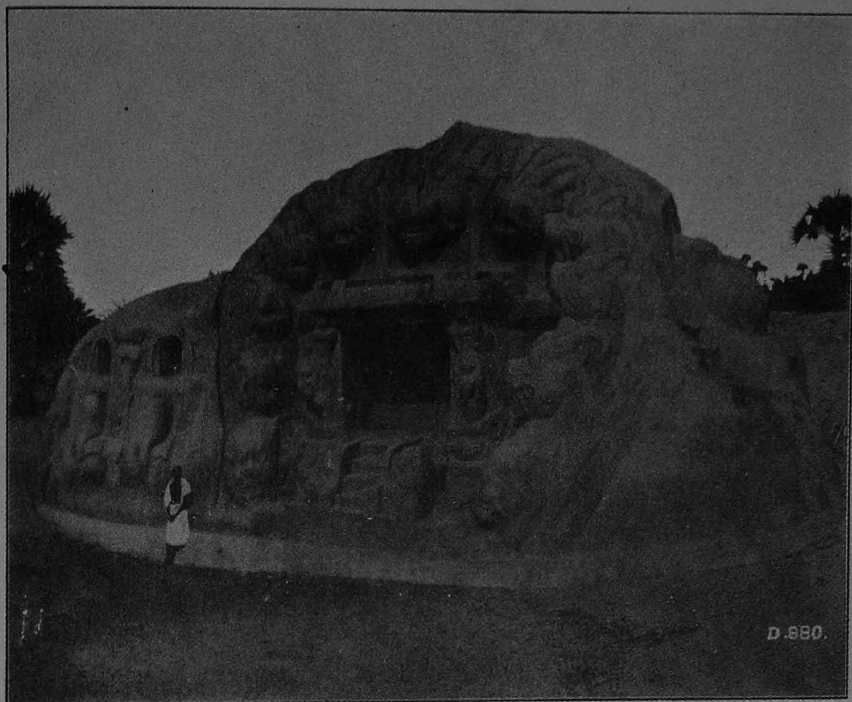
Helio S. I. O., Calcutta



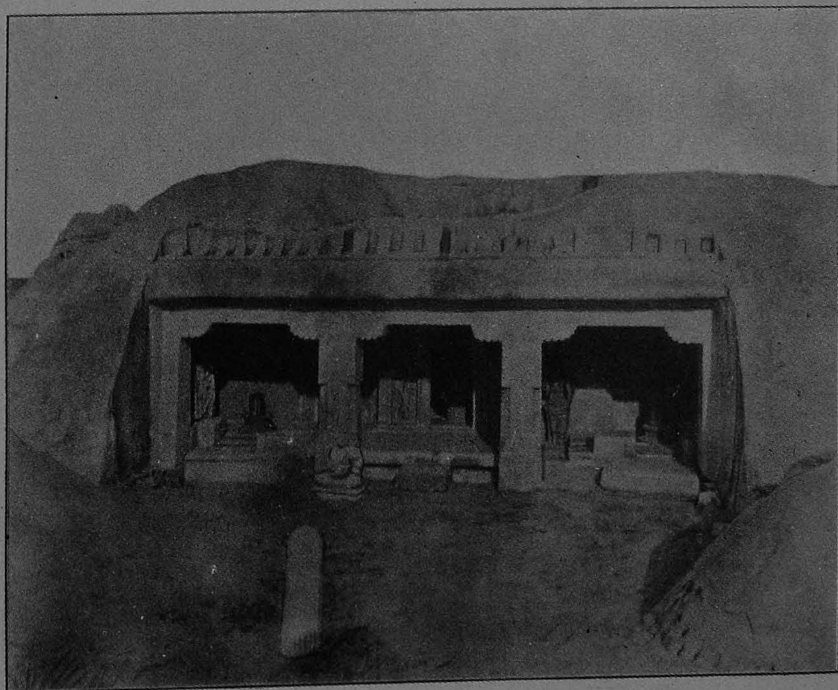
(*a*) UNFINISHED ARJUNA'S PENANCE (NO. 20).



(*b*) GROUP OF ELEPHANTS (NO. 21).



(*a*) THE 'TIGER CAVE' AT SALUVANKUPPAM (No. 24).



(*b*) ATIRANACHANDA'S MANDAPA AT SALUVANKUPPAM (No. 25).

FRONTISPIECE.

